

# **Rethinking Cognitive Style in Psychology**

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# Abstract

This thesis proposes to answer a single question: do the stylistic features of cognition operate independently of cognitive contents? The question itself has a history, and the way it has been framed, and the types of answers it has attracted have been related to ideological and political interests. Chapter 1 reviews four social psychological theories of the relationship between cognitive style and ideological beliefs — authoritarianism, extremism theory, context theory, and value pluralism theory. It argues that these (empiricist) accounts have been bedeviled by a tension between theoretical universalism and political critique, and have fostered the view that cognitive traits are stable, general, and pervasive properties of individual psychology. Chapter 2 focuses on the construct of intolerance of ambiguity, and shows how — in the manner of Danziger's (1985) "methodological circle" — universalistic assumptions have become incorporated into measurement instruments; and how all evidence of individual variability in cognitive style has been accommodated by interactionist models of personality, leaving the empiricist view intact.

Roy Bhaskar's critical realism is used as an alternative to a empiricist psychology, and Michael Billig's rhetorical psychology is used as an alternative to universalistic theories of cognitive style. A measurement procedure is developed which can assess cross-content variability in ambiguity tolerance. Three studies are performed in order to justify a move towards an anti-universalistic conception of cognitive style. Study 1 evaluates the hypothesized generality of ambiguity tolerance on a sample of university students. Factor analysis and correlational matrices show that ambiguity tolerance toward different authorities is domain specific, and that different factors are related to each other positively, negatively, and orthogonally. Study 2 employs the same sample, and uses polynomial regression analysis to show that the relationship between ambiguity tolerance and ideological conservatism is highly variable across content domain. Study 3 replicates these central findings with another student sample and with different scale contents. The results of all three studies are contrary to the predictions of the social psychological accounts of cognitive style. They show that expressions of cognitive style are context- and content-dependent, and suggest that the empiricist "thing-like" ontology be replaced with a praxis- and concept-dependent ontology.

Chapter 6 draws on the traditions of discourse analysis, rhetoric, and dialogics to introduce an anti-universalistic conception of cognitive style. It proposes a new psychological ontology, and adopts the methodology of rhetorical psychology to show the emergent (i.e., indexical, variable, and performative) nature of tolerance/intolerance of ambiguity in dialogical contexts of "joint action". An interview with Koos Vermeulen — leader of the neo-fascist, World Apartheid Movement — is analyzed to show both variability in ambiguity tolerance, and the organization of intolerance of ambiguity into the rhetoric of the far Right. The Bakhtinian understanding of utterance and speech genre is used to explain the manifest expressions of "cognitive style", and is proposed as the (critical realist) generative structures which underlie manifest ambiguity tolerance. The thesis concludes by arguing that critical realism can sustain a sound epistemology, a critical psychology, and a rhetorical account of cognitive style.

## Chapter 1

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# Introduction

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*A picture held us captive. And we could not get outside it for it lay in our language and language seemed to repeat it to us inexorably.*

(Wittgenstein, 1958, sect. 115)

The cognitive style literature was sparked by a vicious transatlantic debate concerning the rationality of fascism. In 1938, the Nazi psychologist E. R. Jaensch had published his *Der Gegentypus* (The Anti-type), in which he claimed that liberalism was essentially an irrational ideology which attracted to itself pathological individuals. For Jaensch,

Social liberalism is paralleled by immutable other forms of liberalism, all of them mentally rooted in the S-type: liberalism of knowledge, of perception, of art, etc. (p. 44)... The lytic S-type has *no firm tie to reality* (p. 37, emphasis added).

According to Jaensch, individuals who were predisposed to adopt a liberal ideology would also manifest an irrational style of cognition. This cognitive style pervaded all aspects of an individual's life and was characterized by instability in judgement and extreme evaluative variability. Hence, liberalism was irrational.

This argument was not taken lightly by psychologists who had fled the Nazi tyranny, and who had accepted the task of studying fascism "in the search for more effective ways to prevent or reduce the virulence of the next outbreak" (Horkheimer & Flowerman, 1950, p. v). In response to Jaensch's reasoning, a first requirement of the social sciences was to "prove" the irrational nature of fascism. Evidence was at hand. On the basis of a large research project conducted in the United States, Frenkel-Brunswik (1948a, 1948b, 1949) could conclude that Jaensch was

wrong. It was the authoritarian J-type, and not the S-type, who was irrational. The argument was an inverted mirror image of Jaensch's. The J-type demonstrated a:

...subtle but profound *distortion of reality*...[which] turns out to be maladaptive in the end (p. 135, emphasis added)...[because] clinging to the familiar and precise detail can go hand in hand with ignoring most of the remaining aspects of the stimulus configuration, resulting in an altogether haphazard type of approach to reality (Frenkel-Brunswik, 1949, p. 141).

In this instance, irrationality was manifest, not in instability and evaluative variability, but in a cognitive style which clung to the familiar and consistently employed rigid and firmly bounded categorization. This, Frenkel-Brunswik termed intolerance of ambiguity, the cognitive style which forms the focus of this thesis.

Although they disagreed on the fundamental issue of which cognitive style was irrational, Jaensch and Frenkel-Brunswik were in agreement about much. It is the unspoken agreement between the two parties which formed the background to their exchange, and which provided the underlying conditions which made their dialogue possible. Furthermore, these background assumptions have continued to shape the thinking of cognitive style within the discipline of psychology. The assumptions are twofold: first, that political issues can be approached scientifically; and second, that this science should be empiricist. The first assumption meant that political and moral issues could be transformed into matters of rationality. The concern with the goodness or badness of liberalism and fascism was transformed into a matter of the irrational nature of these ideologies. This was a useful rhetorical device as it allowed the researcher to make political arguments based on "value-free" fact, and thus avoid accusations of bias. The second assumption maintained that universally true knowledge statements regarding the causal relationship between ideological opinion and cognitive irrationality could be established by Humean criteria — namely, the observation of "constant conjunctions" between ideological opinion and cognitive style.

Today the literature is far more diverse, technically sophisticated, and rhetorically subtle, but these two assumptions remain entrenched as the background against which knowledge statements may be advanced. This is evident not only from the fact that the cognitive style literature has largely remained committed to the single task of finding the true nature of the relationship between cognitive style and ideological content, or because the literature has continued to adopt correlational methods which support theory by the criterion of predictive validity. Nor is it that constructs of cognitive style continue to fall along bipolar continuum, ranging from 'rational' styles of flexibility, tolerance of ambiguity, and complexity on the one hand, to 'irrational' styles of rigidity, intolerance of ambiguity, and simplicity on the other. The main feature of this background, the feature which has remained constant throughout the history of the literature, is

the object of analysis: the self-contained individual.

This object was fundamental to the debate between Jaensch and Frenkel-Brunswik, for it provided the ontological foundation upon which both their political and scientific claims could be based. Although Jaensch spoke of a *stilleinheit* (unity of style) and Frenkel-Brunswik referred to generalized traits, they were talking about essentially the same phenomenon: that individuals had a characteristic cognitive style which coloured all aspects of their life, and that this trait varied across the population of individuals (according to the normal curve). If one was intolerant of ambiguity, this was manifest in all aspects of cognition, behaviour, and affect, and you differed in all these aspects from individuals who were differentially intolerant of ambiguity than yourself.

It is not difficult to see how this object underpinned political and scientific practice. For, if cognitive style was not generalized over different domains of individual life, but instead, individuals manifested rational styles in certain contexts and within particular content domains, but irrational styles in others, then there would be no grounds by which to argue that irrational personality functioning predisposed individuals towards accepting specific ideological beliefs. Instead, these ideological contents could be endorsed by both rational and irrational cognitive styles. The generalized individual was the site where pervasive psychological irrationality and political opinion met. Similarly, this assumption justified the scientific practice which sought constant conjunctions between observations of ideological opinion and cognitive style. Once again, if it was not assumed that cognitive style was a generalized individual phenomenon, then the researcher could never be sure that the instance of cognitive style measured on a particular occasion was indeed the aspect of cognitive irrationality which was supposedly associated with the ideological opinion. There would be no grounds by which to draw causal inferences from the observation of constant conjunctions because these would be rendered unstable.

Despite its scientific and objective veneer, the literature continues to be marked by the radical differences of opinion which characterised the debate between Frenkel-Brunswik and Jaensch. In this thesis I attribute this unsatisfactory state of affairs to the empiricist nature of the scientific endeavour. I argue that empiricism has encouraged the adoption of a false epistemology (i.e., Humean causality, objectivity, and representationism) and a false ontology (i.e., the self-contained individual), both of which have been sustained by assumptions which have been incorporated into the methods and measures by which cognitive style has been studied. This state of affairs is unsatisfactory, not because value judgements have tainted science, but because the psychological study of cognitive style has believed itself to be scientific and objective while, in practice, it has been thoroughly value-driven.

This thesis aims to initiate a process of rethinking cognitive style. This involves a critique of empiricist accounts at methodological, epistemological, and ontological levels. In the end, I aim to advance a rhetorical account of cognitive style which rests on less questionable assumptions than current psychological models, and which can accommodate the manifest individual, cultural, and historical variability in cognitive style. The account which is presented here is based upon recent developments in critical realist (Bhaskar, 1986, 1989a, 1989b) and social constructionist (Gergen, 1985; Harré, 1983; Shotter, 1993a) philosophies of science, which have sought an alternative to dominant empiricist models of psychology. Although there are many different foci and differences of emphasis among these approaches to psychology (including varieties of realisms, discourse analyses, rhetorics, and tectonics etc.), they are unified in their rejection of empiricism, and recommend a radical shift in the object and methodology of social psychology.

The remainder of the introduction has two aims. As has already been noted, the cognitive style literature has basically been an attempt to provide an individualistic account of political beliefs. The first consideration, then, aims to set the cognitive style literature within its historical, political, and theoretical context by discussing the reasons why individualistic accounts of political beliefs have become so influential in psychology. Second, the chapter concludes by identifying the major assumptions which underlie the empiricist account of cognitive style. These assumptions are the focus of attention in the work which follows, and this discussion thus acts as an introduction to the thesis. In addition to considering the content of the thesis, I discuss the style in which the present rethinking will be undertaken.

## **Four good reasons for individualism**

Although cognitivist models of cognitive style have grown in popularity since the 1960's, from its inception, cognitive style has most commonly been theorized as a personality trait, even within the cognitivist tradition. While the individualistic conceptions of cognition clearly have deep roots in the popularity of empiricist models of psychology, there are a number of more specific reasons for the particular, personality-based tint to contemporary theory. These reasons are tied to the initial and, for a long period, virtually sole aim of psychological theories of cognitive style: to develop causal explanations of ideological beliefs. Personality theory could 1) provide an ontological base for ideological beliefs, 2) account for the failure of sociological models of ideology, 3) be supported with certain forms of empirical evidence, and 4) be used to sustain moral/political arguments.

## Ontology

Perhaps, as Eckhardt (1991) concludes his extensive review, authoritarianism, compulsion, conservatism, dogmatism, militarism, nationalism, and religiosity are "different parts of the same forest" (p. 121). With a few exceptions (e.g., Eysenck, 1954; Goertzel, 1987; Heaven & Connors, 1988; Kerlinger, 1984; Ray, 1985), researchers have found this matrix of ideological beliefs to be systematically intercorrelated. The seemingly diverse array of religious, militaristic, nationalistic, and political and economic attitudinal statements cohere empirically as a single first-order or second-order factor (Collins & Hayes, 1993; Comrey & Newmeyer, 1965; Eckhardt, 1991; McClosky, 1958; Wilson, 1973; Wilson & Schutte, 1973; Yellig & Wearing, 1974). In addition, this vector of attitudes appears to enjoy similar cognitive, affective, behavioral, moral, and ideological correlates. Accordingly, ideological beliefs have been argued to be structured along a bipolar Left-Right dimension, from radicalism to conservatism.

A large body of theory has suggested that ideological beliefs are systematically organized by individual personality functioning. While psychologists have recognised the influence of peer, parental, and cohort pressures in determining ideological beliefs, personality has been a favoured explanation since the pioneering work of Lentz (1930, 1939). Personality theory provides a particularly powerful account of ideological beliefs because it can not only explain individual differences in beliefs, but may provide a firm ontological basis for ideology. Ontologically,

...one views liberalism-conservatism from the viewpoint of personality theory — as an individualistic mix of differing cognitive, affective and conative tendencies that find expression and become labelled 'liberal and conservative' (Loye, 1977, p. 155).

According to this argument, the systematization of ideology along the Left-Right continuum is simply due to the fact that individual personality is distributed along this continuum. The social phenomena of ideology is thereby theorized to be a reflection of "this left-right system within us" (Loye, 1977, p. 220).

This ontology is appealing for it has the potential to explain the apparent social and cultural universality of the Left-Right ideological dimension (cf. Loye, 1977; Tomkins, 1963). By locating this dimension within the individual, it is possible to argue that its universality is a function of the psychological properties of individuals comprising all societies throughout history. Thus, in addition to explaining individual predisposition to particular ideologies, personality may provide an ontological base for ideological beliefs, which can account for the systematization of ideological beliefs along a Left-Right continuum, as well as the apparent historical and cultural universality of this continuum.



The ontological status of personality has become so pervasive in psychology that it permeates the language psychologists use when referring to ideological beliefs. Stone (1983), for example, laments the fact that psychologists use a single set of terms — conservatism versus radicalism — to refer to both ideological beliefs and personality traits. This state of affairs, he argues, allows psychologists to forego the responsibility of theorizing causality between personality and ideology because they are assumed to be equivalent. The ontological status of personality is evident in assumptions which assert "an isomorphism between psychology and ideology...[and] imply a particular theory concerning the relation of personality to political attitudes, namely the externalization model" (Stone, 1983, p. 215). The language of psychology asserts that ideological beliefs are isomorphic with, and nothing more than the externalization of personality, their ontological base.

Consider Wilson's (1973) theory of conservatism. According to Wilson, conservatism is essentially a personality trait which reflects a basic psychological need for certainty and order. This personality trait finds expression in (and is inferred from) a range of personal characteristics which censor the ambiguities of the world. The conservative, for example, manifests a rigid and unambiguous cognitive and affective style which demands black-and-white evaluations of objects and events. Conservatism at the ideological level is isomorphic with conservatism of personality. Ideological beliefs such as those which maintain that a unitary truth rests with a supreme authority (e.g., God or state) reflect this need for certainty and intolerance of ambiguity within personality. As such, political beliefs are assumed to arise through the externalisation of personality dynamics as individuals with conservative personalities take and make conservative ideological orientations.

An important consequence follows. Theories of ideological beliefs reduce to theorizing the determinants of individual Left-Right personality differences. These have been argued to be derived from hereditary factors (Eysenck, 1954; Eaves & Eysenck, 1974), social learning (Altemeyer, 1981; Tomkins, 1963), and psychodynamics (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Rokeach, 1960). This is important because it highlights the object of personality theory, the ontology of ideological beliefs. Personality theory is not concerned with individual people, but with the universal properties of psychology across populations. This global psychology has certain properties, and functions according to certain laws, which, when made explicit, will explain why certain individuals are liberal and others conservative. The processes causing individual differences in radicalism-conservatism may explain why we have ideological systems of radicalism and conservatism within society. This global object does not mean that individuals are unimportant or that personality theory is not individualistic. On the contrary,

individuals are the units of analysis and individual differences are fundamental to establishing theory of the functioning of the global psychology.

## **The poverty of universal sociological models**

Given the difficulties in theorizing the causal links between personality and ideology, and the unsubstantiated assumptions of isomorphism and externalization, one may wonder why an individualistic theory is invoked at all. Why do we need to rely on the notion of a fascist personality to explain the awakening of a fascist state? It may well be that personality theory can account for the cause, organization and universality of the ideological left-right dimension, but only at costs to theoretical parsimony. The determinants of ideological beliefs must first be reduced to dynamics which produce individual personality differences, then a rather unwieldy theoretical apparatus needs to be erected to account for causality on the ideological level. Surely a non-reductionist, and far more parsimonious, explanation of a social phenomena such as fascism can be achieved only by theory at a "positional" or "ideological" level of analysis (Doise, 1986).

One reason for the wide acceptance of personality-based accounts of ideological beliefs was the realization that sociological models, which explained ideology in terms of universal socio-historical processes, were flawed. Both Hegel (1931) and Marx & Engels (1970) have offered historical accounts of social change in terms of dialectical shifts between radicalism and conservatism. They both regarded the Left-Right continuum as an attribute of the social order, and not the individuals comprising that order. Hegel, for example, argued that the social "spirit" shifted between the "essential moments" of conservatism and radicalism:

In the course of history, the preservation of a people, a state, and the preservation of the ordered spheres of life, is one essential moment...the other moment, however, is that the stable persistence of the spirit of a people is broken because it is exhausted and overworked...the world spirit proceeds...tied to a demotion, demolition, destruction of the preceding mode of activity... It is precisely here that the great collisions occur between the prevalent, recognised duties, laws, and rights and, on the other hand, possibilities which are opposed to the system (Kaufman, 1965, p. 269).

Conservatism, with its recognition of laws, duties, and rights, was rooted in the dialectics of history, not in the processes underlying personality differences. Where Wilson (1973) talks of conservatism as a personality-based need for certainty and order, Hegel sees it as one pole of the socio-historical dialectic between order and anarchy.

Marx & Engels (1970) criticised Hegel for his idealism, and denounced him for offering a

mechanical account of the dialectic, and for reifying the social "spirit". Instead, Marx sought to theorize the dialectic in terms of the real foundation of history and social change: i.e., human activity, which provided the basis of consciousness. Historical materialism identified the material base to the dialectic between Left and Right in the history of class struggle — "the history of all hitherto existing society has been the history of class struggles" (Marx and Engels, 1967, p. 79). The Marxian account suggested that ideological orientation into Left and Right was a function of class stratification and exploitation which had existed throughout the history of class-based society. At the height of oppression, the theory maintained, magnified class contradictions would precipitate radicalism and revolution. Thus, although Marx rejected Hegel's idealism, he remained committed to theorizing universal, supra-historical principles of history which produced shifts in consciousness between radical and conservative moments.

Historical materialism, however, could not account for the failure of Marxian predictions regarding the immanence of a communist revolution in Germany. The capitalist order, so it seemed, was more resilient than Marx had anticipated. Change did not appear to follow the universal principles of material historical dialectics. As Marx had predicted, capitalist had expropriated capitalist; economic differences between capitalist and worker had amplified; yet, monopoly capitalism appeared as a stable social form. It was precisely this failure which prompted a turn to personality theory. Psychological dynamics were advanced to fill the "gap in Marx" (cf. Billig, 1982; Jay, 1973). The Frankfurt School attempted to explain first the failure of the socialist revolution, and then the rise of German fascism, in terms of individual psychology (cf. Samelson, 1986, 1993). They argued that irrational psychological dynamics contributed to the stability of monopoly capitalism by preventing magnified social contradictions from entering consciousness (Fromm, 1941; Horkheimer & Adorno, 1944; Reich, 1946).

In this way, individual psychological processes were imported into sociological models of ideological beliefs. This culminated with the publication of *The Authoritarian Personality* (Adorno *et al.*, 1950), a text which has set the tone and direction for future psychological studies of ideological beliefs. While clinging to the Marxian thesis that "ideology and mentality are largely fomented by the objective spirit of our society" (Adorno, 1950a, p. 752; Frenkel-Brunswik, 1948b), Adorno acknowledged that their data (especially quantitative) "permit at least the assumption that personality could be regarded as one determinant of ideology" (Adorno, 1950b, p. 655). Adorno *et al.* (1950) thus achieved more than filling the gap in Marx — they laid the foundation for a reductionist account of ideology. Just how their data could permit such reductionist conclusions is important because, since this work has been appropriated by mainstream psychology, it has lost its Marxian base, disregarded sociological accounts of

ideology altogether, and has focused almost entirely on individual differences and psychological dynamics. Ideology has come to be seen as determined by personality, which lies "behind behaviour and within the individual" (Adorno *et al.*, 1950, p. 5). Ironically, in shifting from purely sociological to purely psychological accounts of ideological beliefs, psychologists have dropped one set of universal theory for another.

## **Empiricist evidence for personality**

The assumption that personality is a major determinant of ideology was warranted by the type of empirical evidence which Adorno *et al.* (1950) offered to support their theory of a fascist personality. According to Brown (1965), Adorno *et al.* (1950) had uncovered an ever widening circle of covariation between a set of beliefs which were clearly ideological, and other seemingly unrelated beliefs of a more personal nature. The F scale, for instance, was a coherent, single measure, comprised of attitudinal items which reflected the nine diverse subtraits argued to underlie authoritarianism. Brown found the correlations between this superficially heterogeneous set of opinions remarkable, and suggested that it reflected "some kind of psychological unity" at the root of the unitary personality syndrome of authoritarianism (p. 489). What was even more remarkable, however, was that the scale correlated strongly with ethnocentrism while including no overt references to minority groups. This finding suggested that ideological opinions were only one manifestation of a broader underlying personality dimension. At the centre of this circle of covariation was the individual (generalized personality), located between opinions and behaviours reflecting personality, and those reflecting ideology.

Personality-based accounts of ideology continue to employ similar reasoning (cf. Altemeyer, 1981; McClosky, 1958; Stone, 1986; Wilson, 1973). To confirm that personality predisposes individuals to accepting certain ideologies, researchers have demonstrated that ideological beliefs correlate with a vector of personality traits, which also correlate with each other. The covariation among traits establishes a psychological unity, while their correlation with ideological beliefs establishes causality. Eckhardt's review of the radicalism-conservatism literature is characteristic of such reasoning. Eckhardt (1991) summarises conservatism in terms of the following five facets:

Affectively, the conservative tends to be optimistic, leadership-orientated, conformist, disciplined, extroversive, and misanthropic. Behaviorally, the conservative tends to support capitalism and go to a conventional church. Cognitively, the conservative tends to be dogmatic, positivistic, rigid, intolerant of ambiguity, and to hold hereditary theories of human behaviour. Ideologically, the conservative tends to be capitalistic, militaristic,

nationalistic, and prejudiced. Morally, the conservative is authoritarian, bureaucratic, censorious, religious, punitive, conformist, and law-and-order-orientated (p. 108).

At the nexus of this matrix of covariances is the individual. If ideological beliefs comprise a small segment of a wider matrix of personal cognitive, behavioral, and affective correlates, one has good reason to suspect that these beliefs are but one manifestation of a broader underlying personality syndrome. This is especially true if ideological beliefs are associated with "non-ideological" attributes such as the style of cognition and affect.

The present work investigates the plausibility of knowledge claims of the sort that individuals holding certain beliefs are certain types of people (i.e., they possess characteristic personality traits), and that their personality type determines their ideological persuasion. The discussion is, however, limited to a consideration of cognitive personality traits. This focus reflects the degree to which cognitive traits have been emphasized above other traits in the literature. There are two main reasons for this accent. Firstly, cognitive traits such as rigidity and intolerance of ambiguity are particularly useful for explaining the failure of sociological models of change. If change has not followed Marxian predictions, for example, it may be that cognitive traits like intolerance of ambiguity — which entailed rigid and impermeable categorization — have prevented social contradictions from entering consciousness, thereby contributing to the stability of the system. Secondly, cognitive traits seem to conform, to a stronger degree than other traits, to the definition of personality traits as "(a) organized internal dispositions [which display] (b) stability or consistency over time" (Knutson, 1973, p. 30). Many proposed traits have been found to be unstable and inconsistent over time and situation (Mischel, 1968, 1973, 1979), and thus do not qualify as genuine personality traits. Cognitive personality traits, in contrast, have been argued to be stable and consistent:

Activities which are substantially associated with aspects of intelligence and with problem solving behaviour — like achievement behaviours, cognitive styles, response speed — tend to be most consistent (Mischel, 1968, p. 177).

Cognitive traits are thus compatible with a research approach which seeks to ground an explanation of ideological beliefs in individual psychology. For, if the "left-right system within us" produces stable and consistent individual differences in ideological orientation, then these traits, themselves, must be stable and consistent over time and situation.

## **Moral/political orientation of the literature**

The individual is central to psychological accounts of ideology, for it is the individual (generalized personality) which is the locus where cognitive style and content meet. Thus,

Eysenck & Coulter (1972) found that individuals who endorse authoritarian beliefs manifest a range of (irrational) cognitive traits.

Cognitively, authoritarians were less educated and less intelligent than average, but more rigid and concrete in their thinking even when they were more intelligent than average. They were more intolerant of ambiguity, were more superstitious, suggestible, and autistic, while democratic personalities showed 'greater creativity, imagination, and ability for empathy' (in Eckhardt, 1991, p. 109).

Although this extract illustrates the pivotal role of the individual in psychological accounts of ideology, the single most striking feature of such knowledge claims is their political nature. Finding that proponents of certain beliefs are rigid, concrete, and intolerant of ambiguity, and that proponents of other beliefs are creative and imaginative, is to question the rationality of the former beliefs. Such statements suggest that certain beliefs could only be derived through an irrational cognitive process under the influence, perhaps, of defensive personality functioning.

It is not surprising, therefore, that the dimensions of cognition under consideration reflect so closely the rationalism-empiricism debate which has dominated philosophical concerns with epistemology. At the heart of the matter is the issue of truth. Which cognitive approach is less distorting of reality? Is it the empiricist approach, which seeks to hold rationality in check by the authority of the world external to the individual; or is it the rationalist approach, which offers reason as a buffer between the individual and the "potentially excessive pressure of the immediacy of the senses" (Tomkins, 1963, p. 401; Eysenck, 1954)? The debate between Jaensch (1938) and Frenkel-Brunswik, (1949) was marked by similar (lay) epistemological concerns. Where Jaensch recommended a firm tie to immediate empirical reality, Frenkel-Brunswik advocated a more rationalist orientation which does not cling to the familiar and precise detail of immediate experience.

The moral/political functions of the literature highlights a further reason why the individual gains prominence in psychological accounts of ideology. Psychologists have used the individual as the nexus between belief content and form, and ultimately, rationality. By so doing, researchers have been able to criticise ideological beliefs in terms of rationality. Moral issues have been transformed into epistemological ones. A concern with the morality of fascism, for example, is recast as an issue of the irrationality of fascism. By focusing, then, on the irrationality of individual fascists, the original moral concern is rendered amenable to scientific investigation. Yet, psychologists have achieved more than this. By employing concepts from the language of psychopathology, they have medicalized the issue of ideological morality (cf. Rose, 1988). Not only is individual functioning underlying certain cognitive styles deemed to be irrational, but also pathological.

Overall, though, this shift in rhetorical warrant has not eliminated controversy. On the contrary, scientific evidence emanating from different ideological quarters has demonstrated irrational cognitive functioning among conservatives (Adorno *et al.*, 1950), communists and fascists (Eysenck, 1954), liberals (Jaensch, 1938), radicals (Rothman & Lichter, 1982), extremists (Rokeach, 1960; Taylor, 1960), and among moderates (Sidanius, 1984, 1985).

The Wittgensteinian picture which has held captive psychological thinking of cognitive style is self-contained individualism, and the language that has repeated this picture is empiricism. By rethinking cognitive style, this thesis aims to propose an alternative to the dominant individualistic conceptions of cognitive style. To achieve these aims two central features of empiricist science — the hypothetico-deductive model of scientific progress, and Humean causality — are discussed critically, and the individualistic conception of cognitive style is investigated empirically.

## Overview of the thesis

This thesis draws from critical realist and social constructionist insights to rethink the empiricist assumptions which underlie contemporary psychological accounts of cognitive style. These assumptions are well illustrated throughout the recent special edition of the *European Journal of Personality*, which debated the meaning of the Factor V of the "Big Five" model of personality. This debate is salient to the present work since Factor V, Openness to Experience, is a recent incarnation of the personality dimension underlying cognitive traits. A single extract will serve the purpose of illustration:

...individual differences become represented in languages as single words (e.g., trait adjectives, nouns) if over time language-group members need to discuss them so frequently that extreme economy in their description becomes necessary (Trapnell, 1994, p. 288).

The short extract captures the defining empiricist features of contemporary personality theory. First, Trapnell assumes the reality of the self-contained individual; individual differences are seen as real things which become depicted in language. Secondly, he assumes that language represents or directly reflects this underlying reality. The two assumptions, together, imply that individual differences are an ontological strata which are readily accessible (mirrored) in language, and can thus be represented accurately (economically) in theory.

These two assumptions provide the theoretical basis for empiricism since they justify the hypothetico-deductive, Humean epistemology. They posit the stable, atomistic ontology which



is "ultimately knowable" by empiricist science (Bhaskar, 1986, 1989b). Thus, although Trapnell continues by questioning whether it is minds or hearts which "our English-speaking ancestors" found most significant to Openness in people, and whose features were accordingly deposited in language, he is committed to the notion of an unchanging continuum of individual differences in Openness that is reflected in language. Generally speaking, personality theorists echo the early Humean sentiment, that individual differences reflect a "basic human nature [which] is the same world-wide" and across history (Cattell, 1995, p. 208). This is precisely the stable, atomistic, "thing-like" ontology of the natural sciences which psychologists have adopted (cf. Bhaskar, 1989b; Rose, 1988; Séve, 1975). This ontology underpins a hypothetico-deductive science because it can sustain the unitary evolutionary ideal of linear scientific development. The assumptions of stability may ground a science which aims to develop stable and universal laws of the objective world (including human psychology). Scientific activity then becomes a matter of testing hypotheses (e.g., whether the heart or mind is central to Openness) in order to map out the unitary system of underlying causality (cf. Greenwood, 1991, pp. 1-13). Knowledge, therefore, should progress toward truth.

In addition, this ontology underlies a Humean epistemology — the means by which truth will be found. In order to establish and measure dimensions of personality, researchers have relied primarily on "objective" measures, and correlational and factor analytic procedures. Such research practice, however, must assume that individual differences in "language usage" (e.g., selecting adjectives on objective measures) reflect constant and stable personality traits of the atoms (self-contained individuals), rather than other factors (e.g., situational or methodologically-driven responses). Thus, in addition to assuming that, over time, dimensions of individual differences have become deposited in language, personality theorists have also assumed that individual differences along each dimension of personality are reflected (mirrored) in differences in language usage of individuals with different personalities. This assumption is the touchstone of research which establishes correlations — Humean "constant conjunctions" — between measures of personality and measures of ideological opinions. For, without it, the conjunction of events recorded at a particular instance is rendered unstable and ephemeral. Consequently, the assumed stable, atomistic ontology allows psychologists to seek universal laws of ideological beliefs in the processes which bring about individual personality differences.

Recent critiques of empiricism have highlighted a number of fundamental difficulties with both the hypothetico-deductive model and with Humean causality. First, the hypothetico-deductive model itself was not derived by scientific means (through a hypothetico-deductive process) and appears to have a axiomatic and metaphysical status. Moreover, it has been argued to be



epistemologically naive in insisting on representationism (Bhaskar, 1989b; Rorty, 1979) for it thereby disregards the theory-bound nature of discovery and observation (Feyerabend, 1975; Kuhn, 1970; Danziger, 1990). Secondly, critics have found it necessary to transcend the ontology implicit in the "constant conjunctions" account of scientific laws, for it appears as though there are no such regularities in the world outside the closed systems of experimental activity (Bhaskar, 1975, 1986, 1989b; Chalmers, 1988).

Despite the trenchant critique which has been lodged against empiricism, it continues to maintain its position as the dominant model within psychology, and particularly within the cognitive style literature. In my view, this continued dominance is based on an "*ex post facto* fact fallacy" (Shotter, 1993a). According to Shotter, this fallacy involves mistaking features of talk about some 'thing' "for the features of the supposed 'thing' itself" (p. 83), and thereby becoming "entrapped" in a system which is self-sustaining due to the circularity between initial (prior) interpretations and (later) truth statements. In the present case, empiricist ways of talking about cognitive style have portrayed cognitive style as a property of individual psychology. Psychologists have, in turn, sought to represent cognitive style as just that. Psychological practice thus assumes the self-contained individual to be a reality, and the empiricist assumptions are reproduced by each "truth" generated by the practice. We have become "entrapped" by a standpoint which functions to maintain the system of thought (*ibid*). In other words, by talking about cognitive style in empiricist language — in terms of individual differences and representationism — and correlating personality differences in cognitive style with ideological conservatism, psychologists have established an account of ideological beliefs which, while it may be systematic, is not necessarily accurate or true (as it assumes itself to be).

Each of the following chapters questions the empiricist assumptions which underlie the cognitive style literature. Although Chapter 2 is explicitly a review of the literature which has sought to theorize the relationship between cognitive style and ideological conservatism, it aims to question the hypothetico-deductive model of scientific progress which has informed the literature. The chapter argues that the historical development of theory from approximately 1950 to 1990 cannot be seen as a gradual progression toward more accurate theory. Instead, the literature has been influenced by historico-political change, and has been marked by numerous ambiguities, cul-de-sacs, and regressions over its history. These, I argue, may be understood in terms of two incompatible discourses — empiricist theoretical universalism and political critique — which have influenced scientific attempts to establish the "true" relationship between irrational cognitive styles and ideological beliefs.

If Chapter 2 aimed to demonstrate the theory-bound nature of scientific theorizing, Chapter 3 aims to show the theory-bound nature of observation. Here the focus is narrowed to an interest in the development of the concept of intolerance of ambiguity and the construction of measures to operationalize the construct. The chapter shows how ontological assumptions have been incorporated into measurement procedures, which have, in turn, infiltrated the definition of the construct. Specifically, I argue that self-contained individualism has been (re)produced by measures which have assumed intolerance of ambiguity to be a formal, asocial, and non-evaluative property of individual psychology, which is stable across situation and context. Although the chapter attempts a review of empirical studies which have sought to examine the plausibility of the generalized trait thesis of intolerance of ambiguity, it recognises the inherently theory-bound nature of current measurement techniques — i.e., the *ex post facto* fact nature of the findings — and must reach tentative conclusions.

Chapter 4 approaches the assumptions of individual stability and consistency of intolerance of ambiguity head on. A new measure of intolerance of ambiguity is developed which does not incorporate the generalized trait assumptions which have underscored the previous practice of attributing a single ambiguity tolerance score to each individual. Rather, the Attitudinal Ambiguity Tolerance (AAT) scale measures ambiguity tolerance over a number of content dimensions and then examines whether these are indeed indicative of a unitary personality trait. The results suggest that individual expressions of ambiguity tolerance may vary widely across different content domains, and that the content and style of cognition are inextricably intertwined. Chapter 5 continues the empirical work with the AAT scale. Here the purpose is to explore the nature of the relationship between cognitive style and ideological opinions across different content domains (i.e., religious, political, familial domains). The results of two separate studies are contrary to the predictions of all personality-based accounts of the relationship between ambiguity tolerance and ideological conservatism. The relationship was found to vary substantially across different content domain, and the nature of the relationship appeared to be associated with the meaning that the ideological contents had for the subjects in the context of the study. In other words, rather than personality dynamics underlying the relationship between cognitive style and ideological opinions, the relationship appeared to originate in differential meaning that the different contents had in the ideologically charged context where the study took place.

These findings point to an alternative conceptualization of cognitive style which rejects empiricist attempts to locate cognitive style within individual psychological processes. Accordingly, Chapter 6 proposes a rhetorical account of ambiguity tolerance. In contrast to all psychological theory to date, intolerance of ambiguity is portrayed as a feature of cognition which emerges in dialogical

contexts of "joint action" (Shotter, 1993a). Cognitive style is seen as variable across different utterances of a single speaker but, nonetheless, organized into generic ways of speaking. This chapter undertakes a detailed analysis of a single case — an interview with Koos Vermeulen, leader of the World Apartheid Movement — in order to illustrate the dynamics of cognitive style in dialogical contexts. This research focus completes the move from an empiricist science to a critical realist science which is "exclusively explanatory" (Bhaskar, 1989a). 'Intolerance of ambiguity' is lent new meaning as its ontology is reconceptualized — from being a property of individual psychology, to an emergent feature of talk.

Finally, a word on the style in which the thesis is written. The style is adapted to a rhetorical interest. A curious feature of contemporary social psychology is the degree of isolation that exists between groups of practitioners with different theoretical orientations. The cognitive style literature is no exception. Thus, despite the trenchant critique which Billig (1985a), for example, has levelled against personality-based models of cognitive style, journals like *Personality and Individual Differences* continue to publish papers which do no more than correlate established personality measures of intolerance of ambiguity (e.g., Furnham, 1994). In part, the isolationism stems from the nature of the dialogue between the two schools, which is confined mostly to metatheoretical and methodological snipes and hostile book reviews.

This isolationism informs the style of rethinking cognitive style in this thesis. Although I am 'writing from' a background of social constructionism and critical realism, the approach I take here is eclectic. The rethinking aims, in the end, to offer an alternative to the empiricist accounts of cognitive style which have dominated the literature. In approaching this aim, however, I only partially take a constructionist perspective. While each of the chapters which follow have broader critical aims, the thesis starts out from 'within' the empiricist tradition. The conventions are followed: review of the literature, discussion of measurement techniques, sampling, design, operationalization and quantification, and so forth. It is only by the final chapters that the rethinking has progressed to that stage where I can take up properly a social constructionist position. Here the focus changes quite dramatically. A new object of analysis is offered and a different account of cognitive style is proposed, along with a change in methodology.

My path is such because of the nature of my task. "Rethinking cognitive style in psychology" is an intentionally ambiguous title. On the one hand, I am attempting to rethink the psychology of cognitive style. However, this rethinking is done within the discipline of psychology and must necessarily reflect the *heteroglotic* forces in the language of psychology. Rethinking requires reflecting on the language of the discipline.

## Chapter 2

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# Theoretical perspectives

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*Eventually social psychological theories will be computer programs in which dozens of parameters reflecting measures of the stimulus set will be entered. In addition subjective culture data from samples of individuals, similar to the individuals whose behaviour we wish to predict, will be stored on magnetic tapes... Specific behaviours will then be predicted with specific probabilities...it will permit planners to make statements of the type: "If law X passes, with characteristics A, B, and C, 80 per cent (sic) of this population will do K, and 20 per cent will do L; 30 per cent of this other population will do K and 40 per cent will do L..."*

(Triandis, 1978; Presidential address to the Division of Personality and Social Psychology of the APA)

Since the publication of *The Authoritarian Personality*, researchers in the field have subscribed to an empiricist model of science. They have adopted a Humean understanding of causality and, by assuming the world to consist of some fixed totality of mind- or discourse-independent objects, have posited a criterion of truth which suggests that theories should progressively become isomorphic with reality. Triandis' utopia of a universally predictive social psychology could thereby be attained. Accordingly, the authoritarianism literature is marked by correlational methods which, it has been hoped, would identify the true relationship between cognitive style and ideological beliefs. Due to its implicit representationism — i.e., identity between theory and reality (or signifier and signified) — the empiricist model anticipates a cumulative, linear model of scientific development; as more research is undertaken with improved measurement techniques, psychological theory is expected to progressively reflect the nature of reality.

However, like so many other fields of research in social psychology, interest in the study of authoritarianism has waxed and waned over the decades. The theory has been modified as researchers have argued about the politics and science of authoritarianism, and generated discrepant findings. These modifications have in turn been modified, recast, and sometimes even

rejected in favour of the original theory. So today, there is no single theory of the relationship between cognitive style and ideological beliefs, but four, which live an uneasy cohabitation, being employed by different researchers to explain the "same" phenomenon. The development of theory reflects the non-linear, non-cumulative nature of scientific progress so famously described by post-positivist philosophers of science (Feyerabend, 1975; Kuhn, 1970; Lakatos & Musgrave, 1970). Samelson (1986) thus concludes his historical analysis of the authoritarianism literature by suggesting that "any claim for the progressive accumulation of knowledge in the social sciences will not find *The Authoritarian Personality* and its fate to be a very compelling illustration" (p. 194).

This has a number of central implications for a review of the literature. The empiricist views theoretical difference as error since multiple theories cannot all accurately explain the singular fixed reality. At its core, psychological science should be evolutionary, as truth gradually emerges from "the fires of logical and empirical testing" (Kimble, 1989, p. 498). The error underlying theoretical difference may then be attributed to ideological bias (Tetlock, 1994), extraneous social factors such as competition or social differentiation (Gilbert & Mulkay, 1984; Lemaine, 1984), or methodological imperfections which prohibit complete understanding of reality. Accordingly, the reviewer's task is to peel away the layers of non-epistemic influence, distil the scientific truths, weigh and balance the facts, and finally, reach a well justified conclusion regarding the validity of any theoretical claims. In other words, an empiricist review should strive toward a single coherent account of the nature of the world.<sup>1</sup>

The post-positivist epistemology has recently been expanded to include post-structuralist (Foucault, 1970, 1972; Machado, 1992), social constructionist (Gergen, 1985), and critical realist (Bhaskar, 1986, 1989a, 1989b, Isaac, 1990; Manicas & Secord, 1983) accounts of scientific development. These diverse epistemologies are unified in theorizing an essential non-identity between theory and reality, and they anticipate a fragmented and discontinuous course of scientific development. Critical realists, for instance, distinguish between two layers of reality: the intransitive and transitive realms, which reflect the ontological and epistemological worlds respectively (Bhaskar, 1986, 1989a, 1989b).<sup>2</sup> Intransitive objects exist outside the scientific process, while transitive objects are produced within science as a function of scientific practice. "Objects" of knowledge (e.g., authoritarianism, madness) and facts about these objects are not part of the natural world, but are developed within the transitive realm (Bhaskar, 1989b, chap.

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<sup>1</sup> See Duckitt's (1992) review of the "social psychology of prejudice" literature for an admirable attempt at this type of review.

<sup>2</sup> Similarly, Harré (1979) differentiates between the "practical" and "expressive" orders of reality.

4). As such, these objects (and "facts" about them) are social in character, and structured by norms, social dynamics, and discourse (cf. Danziger, 1990; Foucault, 1965; Merton, 1973). Knowledge claims, therefore, can never be said to be progressing toward truth, as an isomorphism between theory and reality is rendered illusory. Accordingly, a review cannot hope to distil the theoretical truth which reflects brute reality, for as the normative/discursive world of science changes, so too will the facts and objects of discovery (and vice versa).

It appears as though just this has happened: The theory of authoritarianism has undergone radical, discontinuous transformation in response to changed objective socio-political circumstances. As the original theory (which reproached the Right) had appealed to the anti-fascist movement of the late 1940's and early 1950's, so Rokeach's (1960) extremism theory found favour in the West during the Cold War. So radical was this theoretical inversion that Rokeach managed to turn the theory of the authoritarian personality against its original authors, proclaiming the Left to be just as irrational as the Right. Consequently, the 1960's and 1970's witnessed a non-theoretical period of research activity, dedicated to methodological critiques, attempting to muster support for one or the other theory. However, no consensual truth emerged from these fires.

It is less than surprising that the 1980's, the decade that witnessed the end of the Cold War, spawned new interest in re-theorising the authoritarian personality and the relationship between ideological beliefs and cognitive style. Two new theories were advanced. In direct contrast to Rokeach, Sidanius' (1978a, 1984, 1985) context theory predicts extremists to be less intolerant of ambiguity and more cognitively sophisticated than moderates. Tetlock's (1983a, 1984) value pluralism theory advances predictions similar to Rokeach, but for different reasons. Against this recent background, moreover, are still to be found a tireless band, working within the ambit of the original theories of authoritarianism (e.g., Altemeyer, 1981, 1988a; Duckitt, 1989; Stone *et al.*, 1993) and extremism (e.g., Eysenck, 1981; Heaven & Connors, 1988).

The historical and political nature of this theory building process is immediately apparent, and has been discussed elsewhere:

Although [authoritarianism] is a scientific concept conceived to explain human behaviour, it is immediately concerned with politics. This close connection led, in many respects, to the development of the concept which cannot be fully understood in a purely scientific context but which requires political understanding too... The concept has changed in accordance with international affairs, declaring after fascism had been defeated, communism to be the major enemy of western societies (Oesterreich, 1985, p. 101).

As the ideological milieu has changed, so theories have been shaped into forms appropriate to the epoch. Historical change is reflected in two features of the theory. Firstly, the nature of the relationship between ideological beliefs and cognitive traits has varied, identifying different

ideologies with authoritarian irrationality. Associated with this change has been a shifting conceptualization of the individual and the underlying dynamics linking individual cognition to ideology.

Changes in the authoritarianism literature have been strongly influenced by social and political transformation (Samelson, 1986, 1993). Thus, rather than merely evaluating the various studies which have found support for one or other theory, this review attempts to contextualize the theory building process. The four theories are discussed in terms of rhetorical and discursive features of the transitive dimension which have provided the framework for theoretical development. The review constitutes a historical (as opposed to scientific) analysis of the concept of authoritarianism.

This focus recommends the analysis of — rather than empiricist attempts to overcome — the ambiguities, contradictions, and differences which have characterized the body of theory (cf. Billig, 1991; Billig *et al.*, 1988; Parker, 1989a, 1992). The rhetoric of inquiry and the new sociology of science have identified a number of counter themes or discourses which may be drawn on in research and theory development (Gilbert & Mulkay, 1984; Prelli, 1989). In addition to Merton's (1973) description of scientific norms, for example, Prelli (1989) discusses a second set of "counter-norms" — interestedness opposing disinterestedness, and particularism balancing universalism etc. — which guide scientific practice. Accordingly, quite different accounts of the world may be derived by scientists drawing on different themes to guide their investigative practice. Psychological theory is thus not merely a description of reality, but is a (partially) constructive activity where different accounts compete for recognition as truth. Theory building is a rhetorical enterprise (Billig, 1994a; Nelson & Megill, 1986; Simons, 1989, 1990), and as such, must present itself as a coherent, non-contradictory system (Perelman & Olbrechts-Tyteca, 1969). Any possible contradictions must be justified and resolved by rhetorical techniques such as making special cases and using disclaimers. The aim of a rhetoric of inquiry, therefore, is to analyze conflicting discourses within a body of theory in order to study "how scholars legitimately invoke different reasons persuasively in different contexts" (Nelson & Megill, 1986, p. 35).

Recognizing the rhetorical character of the theory building process provides important insights into the nature of theoretical contradictions and inconsistencies. These will not be resolved and eliminated by gaining more accurate understanding of the object of study or by lifting ideological blinkers. Dilemmatic counter themes are inevitable (Billig, 1987a; Billig *et al.*, 1988). However, since incompatibilities exist only in relation to a particular "field of application" (Perelman &



Olbrechts-Tyteca, 1969, p. 202), as the context of theory building changes and the theory addresses itself to new issues, so the nature of the contradictions will change. Billig (1982), for example, has shown that attempts by dissonance theory to incorporate individual variability were never achieved. On the contrary, it was with the "diminishing role of consistency in contemporary society" that interest shifted to attribution theory, and the basic tensions between individual consistency and variability were re-formed along new lines (p. 166).

This chapter reviews the authoritarianism literature with the aim of demonstrating its rhetorical, non-empiricist nature. The conceptual structure underlying the pervasive inconsistencies and ambiguities in the literature is discussed. It is argued that theoretical development has taken place within the parameters of two mutually compatible, but conflicting themes, which have unfolded in different ways over the changing historico-political context of theory development. The following section introduces the counter themes of political critique and theoretical universalism from a conceptual perspective. The "logic" of their overlaps and incompatibilities is explained on an abstract level. This provides the framework for the review that follows. The historical development of the literature is discussed in terms of the way in which the tensions between theoretical universalism and political critique have been re-formed in different circumstances. It will be argued that theory development reflects changed socio-political conditions rather than the insights which psychologists have gained into the phenomenon under investigation.

## Personality: Universalism and political critique

Universalism is a theoretical principle associated with, and sustaining an empiricist epistemology.<sup>3</sup> The appeal to universal law-like truths originated in empiricist attempts to devise a standard whereby the fallible empirical record of particular instances could approach the certainty of *a priori* knowledge. General truths, based on rational deductions, had long been acknowledged as the criterion of certain knowledge. The logical fact that a triangle has angles equal to two right angles, for instance, applies to all triangles in all contexts. The problem for an empirical science was to attain such certainty through observation. The empiricists thus laboured to develop *methods* whereby general, universal statements could be derived from particular experiences (Priest, 1990; Woolhouse, 1988). Popper (1968), for instance, warns against the metaphysical assumption of the uniformity of nature. He argues, instead, that universalism should remain only a methodological rule which enjoins scientists to seek

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<sup>3</sup> See Danziger (1990, 1992) for a discussion of the empiricist roots of academic psychology.



exceptionless universal laws of nature.

A Humean conception of cause was employed as a methodological criterion, which, when coupled with universal theoretical propositions and assumptions of representationism, could guide knowledge acquisition in the direction of truth. The empiricist nature of psychological research is well summarized by Sampson (1983):

Universal laws refer only to empirically observed regularities, not to logical or necessary connections between events. Laws express nonnecessary connections between events, the truth or falsity of which must be empirically determined. The purpose of theories is to provide the set of universal laws employed in explaining the phenomena of interest (p. 74).

This empiricist epistemology has become formalized in the hypothetico-deductive method of hypothesis testing and falsification.

Psychologists, however, have often subscribed to an ontological universalism by *treating* 'reality' — "the phenomenon of interest" — as static and invariant (cf. Markovà, 1991). The vision that Triandis (1978) holds for social psychology as a science, for example, is contingent upon stability in psychological processes and relationships "across time and place" (p. 1). Ontological assumptions of universalism enter psychological practice in two main ways. First, ontological universalism is implicit in empiricism, the guiding epistemology of the science of authoritarianism. By grounding universal truth claims in empirical regularities of events generated in closed systems, and assuming that theory can represent reality, "the ideology of empiricism" regards the world as "flat, uniform and unstructured: it consists of atomistic events or states of affairs which are constantly conjoined, so occurring in closed systems" (Bhaskar, 1989b, p. 8; Chalmers, 1988).<sup>4</sup> Second, the methods and investigatory practices which psychologists have employed to study authoritarianism have embodied assumptions which treat their object of investigation (the self-contained individual) as static and invariant. According to the logic of Danziger's (1985) "methodological circle", the methodology which has been used to investigate authoritarianism has limited "the kind of reality that can be represented in the products of scientific investigation" (Danziger, 1992, p. 310). Most obviously, by taking a single score to represent an individual's cognitive style or authoritarianism, the personality traits are portrayed as generalized and invariant. The empiricist, methodomorphic stance of psychological science precludes, beforehand, the possibility of reflexivity, variability, and historical change in the object of study.

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<sup>4</sup> Empiricism is essentially a philosophy of epistemology. Its ontological assumptions are derivative from the *epistemic fallacy* - the definition of being in terms of knowledge (Bhaskar, 1975, 1989b).

The meaning of 'personality' in academic psychology can only be understood in terms of theoretical universalism. Allport (1981) captures the essence of this understanding of personality by describing psychology as the "science of the mind-in-general" (p. 65). The mind-in-general is the ahistorical and asocial ontology to which "the goals and procedures of the natural sciences" are appropriate (p. 64). Empiricist procedures dictate that the study of personality focuses on individual differences, and proceeds by establishing sets of "commonalities and comparabilities across individuals" (*ibid*). By correlational methods, "one produces sets of variances between the rated individuals" (Danziger, 1990, p. 161). Since "individuals [are] to be known only through their standing in a group" (*ibid*, p. 165), the science of personality is rendered a bus queue science, where no interest is taken in the individual except as a number in a quantitative series. This practice entails an atomistic and individualistic conception of social structure (Bhaskar, 1986, 1989a, 1989b; Porpora, 1989), and has ensured that individual stability has remained assumed. The actual stability and consistency of real individuals is not the focus of personality research. Quite the opposite, the assumptions of individual consistency and stability are essential to investigative practice, for if individuals are not consistent it makes no sense to know them relative to others. Herein lies the irony of an empiricist psychology: for all its attendant individualism, the individuals it studies are rendered "shadowy, disembodied fictions" (Billig, 1994a, p. 323).

The mind-in-general, therefore, is not the individual mind, but is the acephalus mass (of psychology) which inhabits the globe, and which, by some process of differentiation (e.g., hereditary, psychodynamics, or learning), splits up into generalized atomistic segments of individual differences. The individual carries only a slice of the continuum of characteristics which the mind-in-general may manifest; s/he is either liberal or conservative. The mind-in-general is the "thing-like" (Shotter, 1990), "essence-as-substance" (Séve, 1975) which is the object of personality studies. It "appears as both a-historical and a-social: it pre-exists the attempts to study it" (Rose, 1988, p. 180). Consequently, authoritarianism has been seen as a pervasive and stable personality trait, of which global norms may be established (e.g., Melen, 1993). This socially and contextually invariant trait pervades individual psychology so fully that it finds expression in both the structure and content of cognition as well as in emotional life (Adorno *et al.*, 1950; Frenkel-Brunswick, 1948b, 1949; Sartre, 1946). The Left-Right system which Loye (1977) suggests is within us, is a property of the mind-in-general.

This universalistic conception of the individual provides the rationale for an empiricist programme which has critical intent. If a direct, isomorphic relationship can be established between an 'irrational' cognitive style and specific ideological beliefs, then these beliefs can be

reproached on scientific grounds — i.e., that they are "inaccurate", "unsystematic", or "inefficient". It may be argued that the ideology is an expression of a generalized psychological irrationality. This is achieved by Humean criteria. Correlational methods are employed to map the mind-in-general — the (normal) distribution of individual personality differences — onto a distribution of ideological beliefs. By then showing certain personality types to be irrational, the associated ideology may be discredited. This is a powerful rhetorical strategy for instead of using a "biased" moral or political warrant, scientific criteria are employed in political critique.

By assuming ontological universalism, and employing correlational methods to establish a relationship between ideological beliefs and personality, studies of authoritarianism may be used to immediate political ends. All that is required is to show that certain personality traits are more irrational than others. This has been achieved in a number of ways. Firstly, merely labelling certain individuals cognitively simple, inflexible, rigid, intolerant of ambiguity, closedminded, dogmatic etc. has the effect of attributing irrationality to these persons. This is a modern semantic effect which derives from "excess meaning" associated with the *différance* which arises out of the relation of these terms with their opposites — complexity, flexibility, openminded etc. — in the age of reason (cf. Derrida, 1973). Secondly, experimental studies have "demonstrated" that some types of cognition are 'better' (i.e., more efficient, accurate, or systematic) than others (e.g., Frenkel-Brunswik, 1948a; Rokeach, 1948). Finally, irrationality has been theorized at a personality level, for example, in terms of psychodynamic defence. Studies of authoritarianism may thus function as scientific ideology critique. While not as overt as the exchange between Jaensch (1938) and Frenkel-Brunswik (1949), political critique is to be found throughout the literature (cf. Tetlock, 1994; Tetlock, Peterson & Berry, 1993).

In the language of post-structuralism, theoretical universalism can be seen as a component of an empiricist discourse (Parker, 1992). This discourse is a relatively coherent system of meanings which paint a picture of a fixed, ahistorical and asocial reality which can become known through objective scientific methods. Within the psychology of personality, its objects are constant and stable individuals and a unidimensional and atomistic society, and its subjects are the knowledgeable scientist and shadowy and silent research participants and people in general. In addition, the empiricist discourse has had numerous institutional and ideological effects (Danziger, 1990; Horkheimer, 1947; Parker & Shotter, 1990; Sampson, 1983). In the authoritarianism literature the object of empiricist psychology is used to more immediate political ends. A direct relationship between ideological beliefs and cognitive irrationality may be established on the assumption that individuals manifest generalized and stable personality traits.

Although universalism and critique appear to enjoy a symbiotic relationship, both feeding off the body of the self-contained individual, there are a number of deep tensions between them. These arise from difficulties with the assumptions of ontological universalism. While the assumption of ontological universalism sustains critique, it also arrests all possibility of critique. This occurs on two levels. Rhetorically, if critique is too candid, it will be brushed aside, from within an empiricist discourse, as "biased", and discarded as unscientific. The implicit political effects of theory may be used to criticise its scientific value. For example, in response to Stone's (1980) contention that the "myth of left-wing authoritarianism" is perpetuated by a "centrist bias", Eysenck (1981) argues that Stone's lack of objectivity underlies his insistence that authoritarianism is only to be found on the Right.

However, there is a deeper, and hitherto unacknowledged incompatibility between theoretical universalism and political critique. This originates in attempts to establish an isomorphic relationship between personality and beliefs. There is a fundamental incongruity between these "isomorphic elements". On the one hand, the ontology of personality (the mind-in-general) is an ahistorical and asocial entity; while on the other, ideological beliefs are inherently and inescapably historical, social, and non-material (relational). Whereas the mind-in-general can be theorized and measured as a static entity, specific beliefs arise in particular societies at particular moments in history. The liberal ideas of the Enlightenment are, for instance, conservative by today's standards (Eatwell, 1989a). While methodological procedures may screen out any other ontological conceptions of personality, the historical and social nature of ideological beliefs are ubiquitous. Difficulties arise when attempts are made to map a static reality (personality) onto a reality in flux (beliefs). For example, will an authoritarian of 1790 reject *laissez-faire* ideas and one of 1990 endorse them? If so, how is it possible to associate *laissez-faire* ideas with psychological irrationality?

These difficulties surface throughout the authoritarianism literature, where both universal and particular themes are to be found. Adorno *et al.* (1950) were, for instance, engaged in both the political critique of a particular set of (fascist) beliefs within a specific cultural-historical space, and were engaged in a scientific enterprise which demanded theoretical universalism. Consequently, a tension is evident in their work:

...by using the term 'potential fascist' the study clearly belongs to a particular time and place. However, the theory gravitated towards the concept of authoritarianism, which is less specific, for patterns of authority can be found in non-fascist societies (Billig, 1982, pp. 114-115).

While they satisfied the requirements of a scientific psychology, the universal strands negated the critical potential of the work. Not long after they demonstrated authoritarian traits to be

associated with fascist beliefs, others found these same traits to be related also to communist beliefs (Eysenck, 1954; Rokeach, 1960; Shils, 1954). Appeals to scientific universalism undermined the critique of fascism to such an extent that the critics were themselves subject to a similar critique. With changed sociopolitical conditions, the "law" of ideological irrationality could be expanded to encompass the Left.

Theorists have since aimed toward theoretical universalism, but not without reservation. Instead of mapping a personality dimension directly onto (changing) political beliefs, personality has been associated with social processes such as conformity, submissiveness and obedience. By so doing, an isomorphic relationship may be established between two ahistorical elements — personality and social psychological process — effectively removing specific beliefs from the equation.<sup>5</sup> This introduces a second component of universal psychological theories of ideology: in addition to its ahistorical and asocial nature, ideology must be purged of content and must, instead, be conceptualized as a process.

To deal with the problem of a Marxist authoritarian, Altemeyer (1981, 1988a) undertakes such a purging operation. Although he is specifically concerned with the right-wing authoritarian, he suggests that it is not the beliefs as such with which personality is associated, but conformity dynamics. By defining 'right-wing' in terms of conformity, belief content is relegated to the status of an epiphenomenon. Altemeyer offers a tripartite conception of the authoritarian in terms of authoritarian aggression, submissiveness and conventionalism. Consequently, his definition of the "Right" in his theory of authoritarianism captures not only fascists (right-wing beliefs), but also communists (left-wing beliefs):

...to the degree that such violence is committed in behalf of a society's established traditions and authorities it can be called right-wing. In this sense, the mistreatment of Soviet dissidents is no less right-wing than is Guatemalan repression (Altemeyer, 1988b, p. 32).

Here specific beliefs are linked to an irrational personality only by implication. Instead, it is the processes of conformity and submission which are associated with personality and deserve to be labelled right-wing and authoritarian.

Similar theorizing has been offered by Sidanius (1985; Sidanius & Lau, 1989), and is sanctioned by the most recent approaches to the topic (Stone *et al.*, 1993). While theoretical universalism may be achieved in this manner, the potential for political critique is severely compromised as empiricist science succumbs to a vicious relativism. For, depending on whether the beliefs are

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<sup>5</sup> While it is highly questionable that social psychological processes are ahistorical, this has generally been assumed by researchers and theorists (Gergen, 1973; Sampson, 1983).

adhered to through an irrational psychological process, any particular system of beliefs may now be considered irrational. A number of disquieting political implications follow. In a society in which the superior authorities and established traditions sanction anti-racism and democracy, submissive and conforming individuals fighting for these goals may be considered authoritarian and irrational, while the non-conforming bigots are the enlightened non-authoritarians. Since few contemporary researchers would concur with these conclusions the literature is fraught with ambiguity, special cases, and disclaimers, as theorists have attempted to balance universal and critical goals.

The following discussion examines the way in which the overlaps, tensions, and inconsistencies between theoretical universalism and political critique, and the accompanying image of the individual, have shifted and been reconstrued in relation to changing historical circumstances within which authoritarianism has been theorized and studied. The discussion will focus on the personality-based theories of the relationship between the style and content of cognition — authoritarianism, extremism theory, context theory and value pluralism theory.

## **Ideology and cognitive style: A review**

Although the study of individual differences in psychology has traditionally been concerned with a wide range of personality traits, scathing critiques of trait theory (Mischel, 1968, 1973, 1979), and a general disregard for psychodynamic theory in mainstream academic psychology (cf. Parker, 1992, chap. 6), has shifted the focus to cognition, which "seems to have much better temporal and cross-situational stability and influence than most social traits" (Mischel, 1973, p. 267). In accord with this shift, and with the theme of this dissertation, the discussion will be restricted to the relationship between cognitive personality traits and ideological beliefs. This review is thus concerned with psychological accounts of the relationship between the style and content of cognition. This focus does not violate the theories under discussion for, although they are essentially personality theories, they prioritize the structural or stylistic aspects of personality and cognition.

### **The authoritarian personality**

*The Authoritarian Personality* was first and foremost a critical treatise which sought "not merely

to describe prejudice, but to explain it in order to help in its eradication" (Horkheimer & Flowerman, 1950, p. vii). Adorno *et al.* (1950) set out with a prior value system in a programme of "action research" (Sanford, 1981) which aimed to encourage practical change toward a tolerant society. In contrast to the "disinterestedness" of empiricist science, action research "must embody a normative social theory which approves and disapproves of certain social states" (Billig, 1977, p. 402). From the outset, then, political critique was the foremost concern of *The Authoritarian Personality*, and the psychological investigation was guided by a moral condemnation of fascism.

Political critique was achieved by welding fascist beliefs to an irrational cognitive style. This was accomplished by means of psychodynamic theory which, in addition to maintaining a necessary relation between the style and content of cognition, provided an aetiology for cognitive irrationality. Adorno *et al.* (1950) drew on the logic of Freud's (1931) psychodynamic typology to explain the evolution of different individual types. Authoritarian irrationality, they argued, originated in erotic-obsessional psychic conflict. This conflict was manifest in a syndrome of nine co-varying traits — conventionalism, authoritarian submission, authoritarian aggression, anti-intraception, superstition and stereotypy, power and toughness, destructiveness and cynicism, projectivity, and sexual repression (Adorno *et al.*, 1950, chap. 7; Duckitt, 1991a; Forbes, 1985) — which took their form as defences against the underlying psychodynamic discord. Since these defence mechanisms operated at the levels of both content and structure, the theory averred a necessary and direct link between the content and the structure of beliefs.<sup>6</sup> Personality theory thus provided the link between cognitive style and content, and could explain the irrational nature of certain beliefs with reference to the non-functional psychodynamic defences which sustained them.

The theory of authoritarianism proposed a positive linear relationship between conservatism and cognitive rigidity and intolerance of ambiguity. Adorno *et al.* (1950; Frenkel-Brunswik, 1948b) argued that individuals raised in authoritarian families failed to develop an integrated ego; they were unable to integrate strong id impulses with a punitive superego. Both the form and content of authoritarian cognition originated in ego-weakness and the accompanying conflict between erotic and obsessional drives. This underlying emotional ambivalence was overcompensated for by a rigid and unambiguous cognitive style (Frenkel-Brunswik, 1948b, 1949, 1951). In addition, ego-weakness predisposed the authoritarian to a conservative political ideology which allowed satisfaction of the psychological desire to submit to authority as well as to displace hostility to

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<sup>6</sup> Freudian defences operate simultaneously on the levels of content and structure. Blocking, for example, is a structural defence which allows only certain contents to enter into consciousness.

minorities and deviants. As such, the ego-weakness underlying this rigid and unambiguous cognitive style was also directly associated with the acceptance of a conservative, undemocratic ideology. The necessary relationship between cognitive style and content bridged the divide between a moral condemnation of fascism and ethnocentrism and an appropriate theory of their irrationality.

The authoritarian cognitive style was originally conceived as one that was rigid and intolerant of ambiguity.<sup>7</sup> The authoritarian resorted to "black and white solutions" and tended toward "premature closure of evaluative aspects often at the neglect of reality" (Frenkel-Brunswik, 1949, p. 115). It was the Manichean style of fascism and ethnocentrism, where the categories 'like' and 'unlike' and associated evaluations of 'good' and 'bad' were firmly and unambiguously defined (Sartre, 1946). In contrast, the non-authoritarian manifested an ambivalent cognitive style characterized by "a great deal of qualifying phrases and other devices characteristic of an approach that is judicious" (Adorno *et al.*, 1950, p. 463). In addition to its irrational aetiology, an authoritarian cognitive style was argued to be irrational also in its effects: it violated the complexity of reality.

A striking congruence is thus apparent between the value orientation of the theorists and their account of a necessary relation between certain ideological beliefs and individual irrationality. Like the accounts of its theoretical predecessors (Brown, 1942; Frenkel-Brunswik & Sanford, 1945; Fromm, 1941; Horkheimer & Adorno, 1944; Maslow, 1943; Reich, 1946; Sartre, 1946), the denunciation of fascism was an overt concern of *The Authoritarian Personality*. The most significant advance on the earlier theorizing was the empirical confirmation of the relationship between fascism and irrational personality traits. With financial support from the American Jewish Committee, Adorno *et al.* (1950) initiated an extensive programme of empirical research of the relationship between personality and ideological beliefs. They aimed to identify attitudinal clusters associated with fascism, which reflected the theorized personality syndrome of authoritarianism. Accordingly, they attempted to show that a rigid, unambiguous cognitive style was related to a vector of conservative political attitudes.

The most fecund product of this work was the F scale, which has become the standard measure of the authoritarian personality (Meloan, 1993; Sanford, 1973). To assess "implicit antidemocratic trends" at the level of personality, the scale was comprised of ideological opinions

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<sup>7</sup> Adorno *et al.* (1950) used the terms rigidity and intolerance of ambiguity interchangeably. Methodological imperatives have provoked attempts to distinguish between the two (e.g., Altemeyer, 1981).



which reflected the underlying personality syndrome.<sup>8</sup> For example, one of the nine authoritarian traits, anti-intraception, was argued to be manifest in an opposition to subjective and imaginative experience. Quite simply, the underlying erotic-compulsive conflict of the authoritarian prohibited subjective meandering. Accordingly, this trait was measured by the statement: "Nowadays more and more people are prying into matters which should remain personal and private".

In constructing the scale, however, Adorno *et al.* (1950) were careful not to include another set of ideological opinions which was also theorized to reflect the underlying personality syndrome. All overt references to minority groups and political and economic issues were excluded from the scale (Brown, 1965; Forbes, 1985). Consequently, one of the most remarkable discoveries of the whole research program was that the "superficially heterogeneous set of opinions" reflecting the nine different traits of the F scale were held together by "some kind of psychological unity", and correlated with ethnocentrism ( $r=.75$ ) and political and economic conservatism ( $r=.57$ ) (Brown, 1965, p. 489). It appeared as though Adorno *et al.* had managed to construct a coherent and powerfully predictive measure of the authoritarian personality.

However, the F scale embodies the assumption of a necessary relationship between the style and content of cognition. It was constructed according to the assumption that authoritarianism is a right-wing phenomenon which is associated with cognitive rigidity and intolerance of ambiguity. The scale was validated against the anti-semitism scale, as an indirect measure of susceptibility to fascism. Thus, although it was comprised of ideological opinions which reflected the nine traits of the underlying personality syndrome, these were, by definition, conservative in content. Moreover, as a measure of the full syndrome, it has been assumed that the scale measured also the stylistic features of authoritarianism. The conservative contents of the F scale have thus been used as a measure of cognitive rigidity and intolerance of ambiguity (e.g., Harvey & Caldwell, 1959; Maier & Lavrakas, 1984). Consequently, the F scale strongly reflects a radical value orientation: it assumes a necessary relation between an irrational cognitive style and conservative ideological content.

A number of serious repercussions were to result from the psychometric practice of measuring personality by means of ideological content. As *The Authoritarian Personality* was being prepared for publication, major ideological shifts were taking place in the United States. By 1950, Horkheimer and Flowerman could proclaim that "the world scarcely remembers the mechanized

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<sup>8</sup> These attitudinal statements were drawn from fascist talk and writing, including interview data, fascist publications, and the propaganda of anti-semitic American "radio-agitators".

persecution and extermination of millions of human beings only a short span of years away" (p. v). Instead, the embryonic cold war was whipping up the masses, purging academic institutions of "egghead" Marxists, and inciting new ideological ideas. These changes were reflected in the "end of ideology" thesis (cf. Bell, 1960; Waxman, 1968). One of these theorists, Edward Shils (1954), changed his earlier (1948) acclaim of *The Authoritarian Personality* to criticism. Where Adorno *et al.* (1950) had uncovered fundamental differences between the cognitive style and rationality of radicals and conservatives, Shils suggested that these antipodes were equally more authoritarian than moderate, non-ideological democrats.

By assuming a necessary relation between the content, style, and rationality of ideology, Shils (1954) employed reasoning similar to that of Adorno *et al.* (1950). The stylistic similarities between fascist and communist regimes were advanced to verify the irrationality of their contents. Shils (1958, see also Shils, 1968) captures the essential differences between ideological (fascist and communist) and non-ideological (democratic) politics:

Ideological politics makes the most radical and uncompromising distinction between good and evil, left and right, friend and foe, national and unnational, American and un-American (1958, p. 452).

Ignoring for the moment the "radical and uncompromising distinction" which Shils himself makes between ideological and non-ideological politics, this extract expresses the essence of the new critical turn. The Left and Right were argued to share a common, irrational, Manichean cognitive style, and were thus denounced as equally irrational/pathological:

The ideological orientation so frequently draws to itself madmen full of hatred and fear — the paranoids (Shils, 1958, p. 464).

What was evident to Shils' "detached eye" (1954, p. 32), was that the Left was championed by individuals just as authoritarian as those on the Right.

Hans Eysenck had noticed this same "fact", and initiated an empirical programme which "confirmed" these suggestions. Instead of the authoritarian-egalitarian dimension, Eysenck (1954) advanced a continuum of personality traits, ranging from toughmindedness to tendermindedness, which are a "projection on to the field of social attitudes" of a extroverted or introverted personality type respectively (p. 174). Like authoritarianism, toughmindedness is a personality disposition which favours a rigid empiricist approach to reality, and which is intolerant of ambiguity. Although Eysenck waivers between a personality theory rooted in hereditary or psychodynamics (see Eysenck, 1954; Eaves & Eysenck, 1974), his personality T-factor was also assumed to be intimately related to ideological content:

...not a single attitude statement can be found which measures the T-factor without any admixture of Radical or Conservative content (Eysenck, 1954, p. 170).

Eysenck offered two strands of evidence in support of his theory: he found the T-factor to be linearly independent of radicalism-conservatism; and he reports that fascists and communists had more toughminded scores than a control group of politically uninvolved soldiers (Eysenck, 1954, 1975; Eysenck & Coutler, 1972).<sup>9</sup> Presumably, there were a number of ideological opinions (which supposedly reflected personality) which were shared by communists and fascists of the early 1950's. These are not difficult to find. Both communists and fascists rejected religious authority in favour of political authority, and valued collectivism over individualism. Both of these type of opinions permeate Eysenck's T scale. It is not surprising, therefore, that Eysenck's T scale has been found to be composed of two factors, religiosity and humanitarianism (Rokeach & Hanley, 1956; DeFronzo, 1972; Eckhardt, 1991).<sup>10</sup> By assuming a necessary relationship between the style and content of cognition, it was possible — by selecting the "correct" opinions as a measure of an irrational personality trait — to sustain very different critical accounts.

Why had Adorno *et al.* (1950) not seen the similarities between communists and fascists? Quite simply, they were not looking for any. Their allegiance to Marxist theory and renunciation of Nazi fascism dictated an interest in eradicating anti-semitism, ethnocentrism, and political and economic conservatism — issues on which communist and fascist opinion diverged. Since, they theorized a direct relationship between the content and structure of cognition, Adorno *et al.* (1950) assumed that attitudinal differences between communists and fascists would be related to different personality traits. This assumption is evident also in their research design, since the nine trait syndrome was derived by comparing the interview protocols of only extreme scorers: "Linearity of social attitudes was, therefore, assumed, and the middle group was consequently excluded" (Taylor, 1960, p. 3). Had extremists been compared to moderates, Taylor continues, they would have been found to be similar rather than different.

The political orientation at the heart of the programme of action research permeated all aspects of *The Authoritarian Personality*. The central strut of political critique — a necessary, isomorphic relationship between the irrational style and the fascist content of cognition — was assumed throughout the work. Not only was it reflected in theory, but also in the psychometric and methodological practice. This assumption could, however, be employed also as a critique of

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<sup>9</sup> The dubious procedures which Eysenck (1954) employed to verify his theory have received the harshest criticism. See the exchange between Eysenck (1956a, 1956b) and others (Christie, 1956a, 1956b; Hanley & Rokeach, 1956; Rokeach & Hanley, 1956).

<sup>10</sup> Although Eysenck's (1954) methodology prevent the conclusion of orthogonality between toughmindedness and radicalism-conservatism, some evidence suggests that it is possible to separate the beliefs which extremists share from those where they diverge (Eysenck, 1975; Goertzel, 1987; Heaven & Connors, 1988; Stone & Russ, 1976).

radicalism by researchers like Eysenck and John Ray who had strong conservative inclinations (see Billig, 1979, 1985b). With changing historical conditions it was possible to use this same assumption as evidence for the irrationality of Marxism. All that was required was to identify ideological contents which the Left and Right shared, and use these contents as a measure of authoritarianism.

Most of the criticism levelled against *The Authoritarian Personality* was framed in terms of bias. The "response set" debate insinuated that it was the tendency for yes-saying which produced the correlation between the F scale and conservatism (Altemeyer, 1981; Brown, 1965; Duckitt, 1990, 1992; Kirscht & Dillehay, 1967; McKinney, 1973; Ray, 1976; Titus, 1968; Titus & Hollander, 1957). Since yes-saying was considered a personality trait associated with authoritarianism (Adorno *et al.*, 1950; Jackson & Messick, 1957), this critique was not as cutting as that which proposed that the correlation between the F scale and conservatism was spurious, derived from shared content in the measures of personality and ideology (Hyman & Sheatsley, 1954; Shils, 1954; Rokeach, 1956a, 1960; Ray, 1973, 1976, 1979, 1989). At the heart of this spurious relationship, it was argued, was a value orientation which opposed conservatism, and which included conservative contents into a measure of irrational personality traits. Consequently, Ray (1987, p. 559) brands Adorno *et al.* as racists (against conservatives and fascists?)!<sup>11</sup>

The common response to these criticisms has been to construct new measures of authoritarianism.<sup>12</sup> Three strategies have been taken by researchers to address the problem of scale bias. Some, like Altemeyer (1981, 1988a), Wilson (1973), Rigby and Rump (1982; Rigby, 1982), and Kohn (1974), have continued in the same vein as Adorno *et al.* (1950), by simply defining authoritarianism as a right-wing phenomenon.<sup>13</sup> In contrast, Ray (1982a, 1983, 1985) has emphasized the need for an unbiased measure of authoritarianism, and has offered his Directiveness scale as such a measure (Ray, 1976). He contends that it is a true personality measure which, being orthogonal to conservatism (Ray, 1979, 1982b, 1985; Heaven, 1981) and ethnocentrism (Ray, 1976, 1980a, 1981; Heaven, 1980), is ideologically unbiased.<sup>14</sup> Nonetheless, the construct validity of Ray's directiveness scale has also been criticised for its ideological bias in absolving racism and conservatism from moral censure (Duckitt, 1983; Heaven, 1987; Rigby, 1987a, 1987b).

<sup>11</sup> See Stanley Fish (1994) for a series of good arguments against such a conception of racism.

<sup>12</sup> See Ray (1984a) for a catalog of 37 such measures.

<sup>13</sup> There is, however, no fixed meaning to 'right-wing'. See p. 26 for Altemeyer's inventive definition.

<sup>14</sup> See Heaven (1981) and Heaven & Rajab (1980) for contradictory findings.

Although critical of each other, both approaches rest on a common assumption. They pre-define (theoretically and operationally) authoritarianism in terms of content, and thereby assume a necessary relation or necessary independence between cognitive style and ideological content. This has been most unfruitful since debates between validity and definition are circular and intractable *de facto* — i.e., arguments about facts (e.g., is authoritarianism independent of beliefs?) reduce to arguments about definition (e.g., is authoritarianism to be defined as being orthogonal to beliefs).<sup>15</sup> The "unbiased" measures of authoritarianism, rather than being more valid than "biased" measures, merely define authoritarianism in a different manner. Moreover, political values are manifest in both definitions of authoritarianism.

Adorno *et al.* (1950) and their critics are thus united by similar assumptions: their research programmes proceed from a value orientation which theorizes a necessary relation (or independence) between cognitive personality traits and ideological content. This is reflected in all measures which employ ideological contents to assess personality. By selecting the "correct" contents, any theory could possibly be supported since some ideological contents are shared by communists and fascists, while others are not. In addition, being historical, precisely which ideological beliefs are shared by opposing ideologies is variable. For example, in a longitudinal study (1963-1974) of British voting patterns, Himmelweit, Humphreys, Jaeger & Katz (1981) found that the legalization of homosexuality among consenting adults "ceases to be part of the liberal belief system and becomes part of the consensus of society" (p. 201). If a necessary relation exists between the style and content of cognition, then, in different time periods, similar styles should be associated with the acceptance of homosexuality in relatively extremist and moderate circles. Similarly, in moving from a component of fascism in the 1940's, through the green movement, to a liberal ideology (cf. Dixon, Foster, Durrheim & Wilbraham, 1994; Gröning & Wolschke-Bulmahn, 1987), ecologism should be associated with a similar (rational or irrational) cognitive style in both fascism and liberalism. Thus, while political critique may be achieved by positing a necessary relation between style and content, this critique may only be sustained within particular historical and cultural contexts, contravening the empiricist ambition toward theoretical universalism. The universal and static mind-in-general cannot be mapped onto historically and culturally specific beliefs.

A final strategy to address the bias of the F scale has been to define and measure authoritarianism in terms of its stylistic features and not in terms of ideological content. It may be true that this simply constitutes another preferred definition of authoritarianism. However, the focus on stylistic

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<sup>15</sup> This is evident in the exchange between Duckitt (1983, 1984) and Ray (1984b).

aspects of authoritarianism has the methodological/rhetorical benefit of circumventing the criticism of spurious relationships that may arise between content-based measures of both authoritarianism and conservatism. In addition, by divorcing style from content, universal theories of the relation between personality and ideology may be advanced. This approach was adopted by Milton Rokeach (1956a, 1960), and has since become the backbone of investigations into a "general theory of authoritarianism".

### Extremism theory<sup>16</sup>

Extremism theory postulates a curvilinear relationship between cognitive personality traits and ideological beliefs. By arguing that communists and fascists are equally less tolerant of ambiguity than moderates, Shils and Eysenck may qualify as extremism theorists. However, their work offers no theoretical advances over that of Adorno *et al.* (1950) since their predictions rely on the same fundamental hypothesis of a necessary relation between the style and content of cognition.<sup>17</sup> Only with Rokeach can one detect theoretical and methodological attempts to sever cognitive style from content. Rokeach (1956a, 1960) argues that cognitive style is related to the dynamics of extremism, and thereby only indirectly related to specific ideological contents. The actual beliefs associated with any cognitive style are reduced to an epiphenomenal status. Personality thus acquires a new theoretical function: it acts as a dynamic whereby cognitive style may be mapped onto the (universal) psychological processes underlying extremism. Consequently, Rokeach may offer an "ahistorical", "general theory of authoritarianism" (Rokeach, 1960, p. 9; 1956a, p. 3), since an authoritarian cognitive style may now be associated with a wide range of beliefs (e.g., political, religious, and academic), within any historical period.

To achieve a general theory, Rokeach divorces cognitive style from cognitive content:

A first requirement is the need to make a sharp distinction in theory — and to translate this distinction into empirical research — between the structure and content of ideological systems...to formulate systematically the structural properties of a person's ideology quite apart from its specific content (Rokeach, 1956a, p. 3).

By defining and measuring the content and style of beliefs separately, Rokeach escapes the circularity between defining authoritarianism in terms of particular contents, and validating measurement instruments which operationalize authoritarianism in those terms. Any relationship

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<sup>16</sup> Also known as ideologue theory.

<sup>17</sup> Although Rokeach's theory is often grouped together with accounts advanced by Shils and Eysenck, the present distinction is congruent with that made by Stone & Smith (1993).

between independent measures of belief structure and content would be uncontaminated by content commonalities between the measure of cognitive style and the measure of ideological beliefs.

For Rokeach (1954, 1956a, 1956b, 1960), the primary characteristic of an authoritarian cognitive structure is dogmatism, defined as:

- (a) a relatively closed cognitive system of beliefs and disbeliefs about reality, (b) organized around a central set of beliefs about absolute authority which, in turn, (c) provides a framework for patterns of intolerance and qualified tolerance toward others (Rokeach, 1954, p. 203).

Dogmatism embraces the notion of a rigid cognitive structure which is intolerant of ambiguity between beliefs and people which are respected and those which are rejected. A dogmatic cognitive style was accordingly characterized as being closedminded. All belief systems, Rokeach adds, can either be open or closed with regard to other beliefs and people. Freudianism, for example, could supply the last word on personality theory, or it could be accommodating of other accounts.

A dogmatic cognitive style was theorized to serve defensive psychodynamic functions for individuals whose early development had engendered a set of "pre-ideological" beliefs which encouraged overidentification with an absolute authority (Rokeach, 1956a, 1960). Essentially, a dogmatic cognitive structure allows an individual to overcome contradictions within his/her belief system in the most simple manner: by accepting the word of an absolute authority (e.g., Freud, the cause, the party, or God). The cognitive manifestations of such a strategy include isolation between different beliefs (rigid categorization and intolerance of ambiguity) and denial (Rokeach, 1956a, 1956b, 1960).

Instead of positing a necessary relation between personality and belief content, Rokeach argues that dogmatic cognitive traits will be associated with the extremism of beliefs. Underlying the relationship between dogmatism and extremism is the psychological process of *commitment* (Rokeach, 1956a).<sup>18</sup> Since extreme ideologies demand commitment to an ultimate source of truth, they satisfy the defences of an underlying dogmatic personality. Consequently, dogmatic individuals will be attracted to extreme ideological positions — both fascist and communist — and to other closed systems such as catholicism. This allows Rokeach to transcend the cultural and historical particularities and biases which result from associating an irrational cognitive style

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<sup>18</sup> Rokeach (1960) also uses the terms "reliance on authority", "yielding", and "conformance" to depict the psychological processes underlying the relationship between dogmatism of personality and extremism of ideology.

with specific beliefs. By mapping cognitive irrationality onto a psychological process which predisposes individuals to extreme ideologies, Rokeach may aspire to a truly universal theory, for all societies contain extreme ideologies of one kind or another. Moreover, such a theory is not biased in the same manner as the theory of authoritarianism since it does not castigate any particular ideological contents, but the historically variable contents which characterize extremism in different societies.

These conclusions are reflected in Rokeach's (1956a, 1960) theory of prejudice. It is not anti-semitism and racism which concerns Rokeach, so much as a general theory of intolerance. In accordance with its defensive functions, a dogmatic cognitive structure acts:

...as a framework for organizing attitudes of intolerance...toward people in general according to the beliefs that they accept or reject (Rokeach, 1956a, p. 10).

Any system of beliefs which sustains its truths by faith in an absolute authority, Rokeach argues, also organizes the world unambiguously into individuals who share its beliefs and those who do not. This, in turn, leads to intolerance of others accepting different beliefs. Such intolerance is evident in the use of "opinionated language" — that is, statements which reject a belief, but which simultaneously involve rejection of individuals holding such a belief. Whereas racial prejudice is a specific kind of opinionated rejection employed by conservatives, opinionation is a general theory of intolerance. Extremist dogmatism ensures that similar levels of intolerance would be found among the extreme Left and Right. In this way, a universal theory undermines any critical potential beyond an appeal to moderatism. A general theory of intolerance condemns not only intolerance of Blacks and Jews, but also Jungians by Freudians, and even racists by Blacks!

To test his theory, Rokeach (1956a, 1960) designed the Dogmatism scale to measure general authoritarianism, and the Opinionation scale to measure general intolerance. He hypothesized a curvilinear relationship between the two, with high levels of dogmatism associated with both left opinionation (rejecting individuals who proclaim leftist ideals) and right opinionation. Furthermore, as a measure of general authoritarianism, the Dogmatism scale was hypothesized to be linearly independent of ethnocentrism (conservative intolerance) and radicalism-conservatism, but to correlate with the F scale, which measured authoritarianism over and above its conservative bias. Finally, to test the central dynamic of his theory, Rokeach hypothesized that the greater the group pressures toward commitment to an ideology, the greater will be the dogmatism and opinionation.

Rokeach's (1956a, 1960; Rokeach & Fruchter, 1956) empirical work provides a wide range of



support for all three hypotheses. When arranged on a continuum from Left to Right, extreme groups on both sides scored highest on dogmatism (cf. Rokeach, 1960, p. 114). In addition, extremists on both the Left and Right demonstrated higher levels of opinionation against their ideological opponents, and expressed higher levels of ideological commitment. Dogmatism thus appears to be linearly independent of ideological beliefs, but associated with extremism. Since ideological commitment mediated this relationship, Rokeach (1956a) argued that dogmatism was associated with extremist ideologies because these demanded commitment to an absolute authority, and not because of their specific ideological contents.

Ensuing research has supported many of the basic predictions of dogmatism theory.<sup>19</sup> Dogmatism, opinionation, and ideological commitment seem to covary in theoretically expected ways. In support of the relationship between dogmatism and commitment, DiRenzo (1967) found political elites to be significantly more dogmatic than their relatively uncommitted followers. High levels of dogmatism have also been found amongst individuals with strong religious commitment (Feather, 1967; Juan & Haley, 1970; Kilpatrick, Sutker & Sutker, 1970). Some convincing evidence has also suggested that political extremism on both the Left and Right is associated with intolerance of others characteristic of opinionation (McClosky & Chong, 1985).<sup>20</sup>

These findings provide support for the predictions of extremism theory as they suggest that the relationship between dogmatism and beliefs is mediated by the psychological process of commitment. They thus imply that the style and content of cognition are independent of each other. However, a growing body of research has not found support for this fundamental proposition. In his review of studies "thought to be representative" of those investigating the relationship between dogmatism and political beliefs, Stone (1980) cites the work of Barker (1963), DiRenzo (1967), Hanson (1968, 1969, 1970), Knutson (1974), and Smithers & Lobley (1978). All these studies show dogmatism to be linearly associated with conservatism, as predicted by the theory of authoritarianism. Stone (1980) concludes by reaffirming Brown's (1965) earlier sentiment:

There may be similarities in personality between communists and fascists, but existing evidence strongly suggests that authoritarianism is a personality and attitudinal syndrome characteristic of right-wingers (p. 14).

The variable, commitment, cannot account for these findings as this would imply that conservatives are more committed to their beliefs than liberals.

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<sup>19</sup> See Ehrlich & Lee (1969) and Vacchiano *et al.* (1969) for reviews of the dogmatism literature.

<sup>20</sup> Stone (1993) portrays this relationship as a fact: "Extremism theory works opinionation" (p. 170).

Oddly enough, Rokeach's (1956a, 1960) original research had also yielded a small but consistent association between conservatism and dogmatism. His explanation of these findings tends to undermine his theory of an independence between the style and content of cognition:

Whatever the motivations may be which lead one to embrace antihumanitarian ideologies may also lead one to develop what we have called a dogmatic belief-disbelief system (1956a, p. 39).

This argument is precisely the same as that used by Adorno *et al.* (1950) to posit a necessary relation between cognitive style and content. It suggests that personality may predispose individuals both to dogmatic cognition and antihumanitarian ideological contents. As such, it contradicts Rokeach's theory of general authoritarianism since it suggests that a dogmatic cognitive style is more likely associated with conservatism, which is "intrinsically" more antidemocratic in content than liberalism.

These disconfirming findings have been attributed to biases in the Dogmatism scale (Billig, 1976; Stone, 1980). Indeed, Parrott & Brown (1972) have demonstrated that college students classified the items of the Dogmatism scale overwhelmingly as conservative. It thus appears as though Rokeach had not managed to satisfy his "first requirement" of measuring the content and structure of beliefs independently. Like the F scale, the Dogmatism scale assesses personality by means of ideological opinions. Further evidence for Rokeach's latent assumption of a necessary relation between the style and content of cognition is given in his rationale for item selection:

It was necessary to assume that the [Dogmatism] scale would be employed as a research tool primarily in countries where at the very least the word 'democracy'...has positive valence (Rokeach, 1956a, p. 6).

This assumption was necessary because Rokeach had used the concept of democracy as a "sky hook" from which the scale could be ideologically balanced between the Left and Right. Similarly, the Opinionation scale measured left and right opinionation, but not centrist opinionation.

As such, Rokeach failed to meet his first requirement at both an empirical and theoretical level. Not only does he measure cognitive style in terms of content, but he also theorizes that certain contents are necessarily non-dogmatic. By measuring dogmatism in terms of anti-democratic opinions, Rokeach, much like the end of ideology theorists, implies that a centrist, liberal democratic ideology is *a priori* non-dogmatic. He thus assumes that there is something irrational about the cognitive functioning of individuals supporting ideologies which deviate from a centrist liberalism.

These assumptions compromise Rokeach's aim toward a general, ahistorical theory of authoritarianism, but allay some of the disturbing political implications of dogmatism theory. To

achieve universalism, cognitive style must be theorized independently of belief content since a universal theory cannot be concerned with the dynamic nature of beliefs and cannot restrict itself only to countries which valorize democracy (cf. Rokeach, 1956b). However, once cognitive content and style are theoretically divorced from each other, there can be no rationale by which to define certain ideological contents as more dogmatic than others. All ideological contents — including democratic and anti-racist beliefs — may now be associated with cognitive irrationality. Since this is a conclusion which Rokeach rejects, he vacillates between a universal theory and one which can sustain political critique in the form of a "centrist bias" (Stone, 1980). Rokeach's ambiguity is evident in the fact that his theory has been interpreted as suggesting an independence between dogmatism and specific ideological contents (e.g., Jones, 1973), and as suggesting a necessary relation between the two (e.g., Steininger, Durso & Pasquariello, 1972).

This same tension is manifest in the way in which Rokeach defines and identifies extremists. Sidanius (1978a, 1984, 1985) has criticized Rokeach for defining extremism in terms of ideological content. While certainly true, Sidanius does not capture Rokeach's ambivalence. Rokeach balances rather precariously between an *a priori* definition of extremism in terms of content (i.e., fascism, communism and catholicism), and a more relativistic definition in terms of deviance to the "left-of-centre" and "right-of-centre" (Rokeach, 1956a). A relativistic definition is not restricted to a particular socio-historical location and can aspire to theoretical universalism. While Rokeach aims toward a universal theory, his relativist definition of extremism has a centre defined in terms of democratic content. It is located in a particular socio-historical juncture and ideological deviance from this centre is associated with specific contents.

Rokeach's ambiguity has meant that his theory is near irrefutable because any set of data can be interpreted either in terms of a relative or content-based definition of extremism. Kilpatrick, Sutker & Sutker (1970), for example, felt that they had contradicted Rokeach's theory by finding protestants and Jews to be more dogmatic than catholics in a Southern American sample. However, by drawing on the relativistic definition of extremism, it also is possible to argue that the findings are consistent with Rokeach's theory since protestantism in the Southern states is relatively more extremist than catholicism.

Although Rokeach had failed to disentangle cognitive style and content in his hope to achieve a universal theory of their relationship, it may be premature to accept Stone's (1980) conclusion that authoritarian cognition is characteristic only of right-wingers. Firstly, despite recognising the "ideological biases" of the Dogmatism scale (p. 8), Stone reviews studies which have used this measure in order to show that the personalities of ideologues on the Left and Right are dissimilar.

Secondly, the cited studies are not as representative as they may have been (Eysenck, 1981). While other studies have supported Stone's conclusion that a dogmatic style is linearly associated with conservatism (Bailes & Guller, 1970; Hanson, 1983; Karabanick & Wilson, 1969; Neuman, 1981; Tetlock, 1983a; Thompson & Michel, 1972), a number of studies have shown structural variables to be associated with beliefs in the curvilinear manner predicted by extremism theory (De Vries & Walker, 1987; DiPalma & McClosky, 1970; Linville, 1982; McClosky & Chong, 1985; Taylor, 1960), and still another has found no relationship between cognitive style and sociopolitical beliefs (Warr, Schroder & Blackman, 1969). In other words, Rokeach's failure to disentangle cognitive style and content does not necessarily mean that other attempts at theorizing and measurement could not: 1) clearly separate style from content, and demonstrate their independence, or 2) demonstrate a relationship between the two which is contrary to the predictions of Adorno *et al.* (1950).

During the 1980's, interest in theorizing the relationship between cognitive style and sociopolitical beliefs was revived. Unlike the earlier work which theorized cognitive irrationality in an ideological milieu which offered clear and unambiguous conceptions of good and bad, fascism was now long dead and the Cold War was drawing to a close. The need for an extensive ideological critique was no longer as pressing as it had been. Consequently, theory could proceed toward universalism unimpeded by a critical imperative. It is only during this period that Rokeach's "first requirements" have been satisfied. Sidanius has managed to distinguish the style of cognition from cognitive content both theoretically and methodologically.

## Context theory

There is a noticeable rift in the literature between Rokeach and Sidanius. Whereas the earlier work had been overtly political, Sidanius is distinctly apolitical. His prime concern is not to critique the great political movements of the twentieth century, but to build a model of the relationship between cognition and beliefs. Consequently, Sidanius' conception of irrationality is more prosaic and individualistic. While Adorno *et al.* (1950) and Rokeach were concerned with the aetiology of individual irrationality and its relationship to ideology, they were primarily interested in the ideological sites where this surfaced — that is, the ideological constellations of fascism and communism, and ideological beliefs such as racism and anti-semitism. Sidanius, on the other hand, has little to say about specific ideologies. Instead, his interest lies in the relationship between individual cognition and extremism in the purely relative sense. Since any set of beliefs may relatively extremist (i.e., deviant) in different contexts, the only critical

potential which may be derived from context theory concerns the rationality of individual processes associated with either conformity to or deviance from social norms.

Context theory advances a hypothesis exactly opposite to that of extremism theory: rather than being more dogmatic, extremists are expected to be more tolerant of ambiguity, more flexible, and more cognitively complex than moderates (Sidanius, 1978a, 1984, 1985; Sidanius & Ekehammar, 1976, 1977; Sidanius & Lau, 1989). Sidanius sees the good side of extremism. In fact, according to Sidanius, German Nazism and Soviet communism were not extreme ideologies, but mass ideological movements.<sup>21</sup> It is precisely their status as conformity responses which accounts for their irrationality. Instead of relying on individual reason, adherents of these ideologies were swept along by mass opinion. Accordingly, the predictions of context theory resonate with the findings of the relative deprivation literature, which has shown political activists and extremists to be more highly educated and politically sophisticated than moderates (cf. Caplan, 1970; Forward & Williams, 1970; Sears & McConahay, 1973).

Sidanius (1984, 1985, 1988b) proposes a "conformity-type" model of social attitudes. In contrast to the "dissonance-type" models advanced by Adorno *et al.* (1950) and Rokeach, individuals are not portrayed as attempting to reduce conflict between contradictory ideological beliefs, and it is not to any ideological authority that the individual looks to reduce incongruity between opposing versions of reality. Rather, individuals are seen as normative beings who seek approval by maintaining the modal beliefs of any social context. Personality is of significance to this theory as certain traits allow the individual to resist the "modal pressure" aroused through non-conformity (Sidanius, 1984), and enable participation in extreme (non-normative) ideologies. Thus, instead of ego-defensive functions at the heart of extremist and authoritarian irrationality, context theory associates irrationality with the instrumental motives toward acceptance and approval (Sidanius & Lau, 1989).

A number of traits are expected to be associated with ideological deviance. Initially, extremists are expected to possess certain characteristics which allow them to adopt deviant and unpopular positions. These include a *mélange* of concepts from cognitive theory and psychodynamics — field independence, ego strength, high stress tolerance, tolerance of ambiguity, and self-confidence (Sidanius, 1985, 1988a). "Intellectually 'weaker' citizens (*sic*) are much more likely to gravitate toward the ideological middle and safer ground" (Sidanius, 1985, p. 639). Further

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<sup>21</sup> Underlying this shift is a subtle change from an "outsiders" perspective, which views fascists as callous and irrational extremists, to the "insiders" perspective which sees the fascists of the second world war as bureaucrats swept along by mass opinion (cf. Arend, 1963).

cognitive implications are expected to evolve once an extreme ideology has been adopted. Since extreme beliefs require intellectually convincing defensive arguments, extremists are expected to expend greater effort in active search of political information and display greater cognitive skills than the average citizen (Sidanius 1984, 1988b). Consequently, extremists are theorized to be cognitively sophisticated and "more genuinely interested in sociopolitical affairs" than moderates (Sidanius, 1985, p. 638).

Distinct "dispositional" and "experiential" correlates of extremism are thus evident in Sidanius' reasoning (cf. Duckitt, 1992; Kelman & Barkley, 1963). Dispositional traits refer to personality attributes (e.g., tolerance of ambiguity, ego strength) which provide the individual with a stable and general psychological capacity (Kelman & Hamilton, 1989, p. 266). Dispositional traits may promote or hinder participation in the environment. Environmental experiences, in turn, feed back and produce changes in the individual. Once an extreme ideological position has been adopted, for example, the individual must engage normative opposition, which promotes flexible rhetorical abilities and cognitive sophistication.

Sidanius has achieved Rokeach's "first requirements" toward theoretical universalism by drawing sharp theoretical and methodological distinctions between the content and the style of cognition. He defines extremism in a purely relative sense — as deviance from modal beliefs — and thereby purges "ideology" of all reference to content.

The nature of the interface between political ideology, personality and cognitive style...[does] not lie in the specific contents of any particular ideology, but rather in the degree to which a given ideology deviates from the norms of a specific culture at a specific time (Sidanius and Lau, 1989, p. 87).

By severing cognitive style from content, a universal theory of their relationship may be achieved. Since all ideological contexts have normative and deviant beliefs, the predictions of context theory are, ironically, a-contextual and ahistorical. The theory is equally applicable to ideological extremism in Maoist China of 1970 as it is to America of 1990 (Sidanius, 1984, 1985; Sidanius & Lau, 1989).

This shift overcomes the tension evident in Rokeach's ambiguous definition of extremism — in terms of both content and deviance. Now, moderate liberal democrats could conceivably be as dogmatic as totalitarian extremists, but within different contexts. The essential difference between the two theories lies in their conceptualization of centrist beliefs. Rokeach's political centre is liberal democratic, whereas Sidanius' contains no fixed content; extremism is "contentless" (Sidanius, 1978a, p. 217). As such, Sidanius is better equipped to build a universalistic theory for there is now no necessary link between either the content and style of a particular belief

(Adorno *et al.*), or the content and extremeness of the belief (Rokeach). Sidanius, in other words, does not employ a specific content as a "sky hook" from which to define the irrationality or the deviance of beliefs. His model "has the major theoretical advantages in that it avoids the time and culture boundedness of conventional studies of belief systems" (Ward, 1986, p. 142).

Sidanius also measures cognitive style independently of beliefs. One of the "greatest strengths" of his empirical work is his use of "active, direct and multiple tests of cognitive processing" (Ward, 1986, p. 142). Many of the indices of cognitive functioning investigated by Sidanius are derived from experimental procedures which require subjects to think about and process information.<sup>22</sup> Cognitive style is not assessed by beliefs and opinions as it is in the F scale and Dogmatism scale. Sidanius thereby circumvents any possible spurious relationships that may arise from measuring both cognitive style and content by means of opinions. He parries any criticism of ideological bias. Sidanius' research may thus provide a new perspective on the issue of whether or not extremists on the Left and Right demonstrate similar styles of cognitive processing.

To test his predictions, Sidanius (1978a, 1978b, 1985, 1988b, Sidanius & Lau, 1989) has examined linear and curvilinear trends between conservatism and various different indices of cognitive style. In accordance with recent empirical evidence (Durrheim & Foster, 1995; Robertson & Cochrane, 1973; Sidanius, 1978a, 1984; Sidanius & Ekehammar, 1976; Sidanius, Ekehammar & Ross, 1979), Sidanius treats conservatism as a multidimensional construct. Interpreting the overall pattern of linear and curvilinear associations between a number of different measures of cognitive style and different dimensions of conservatism, over different studies, is a rather formidable task (but see Appendix A for an attempt). Generally speaking, the results of Sidanius' research have not provided convincing support for the predictions of context theory. In part, this is due to methodological problems, including sampling and measurement validity (Ward, 1986, 1988; Ray, 1988). Of more concern, though, is that of the large number of associations that have been observed between different measures of cognitive style and conservatism, very few have supported the predictions of context theory. It would seem premature to conclude that context theory specifies *the* relationship between cognitive style and ideological beliefs.

There has, however, been some support for context theory. In addition to the relative deprivation literature and some of Sidanius' findings, other research has found moderates to demonstrate less

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<sup>22</sup> See Appendix 1 for an analysis of Sidanius' research and findings.

cognitive complexity than extremists (Nidorf & Argabrite, 1970; Rydell, 1966; Tesser & Leone, 1977). Also, Sidanius' (1988b; Sidanius & Lau, 1989) more recent interest in the relationship between political sophistication and extremism has yielded clearer support for his predictions. This change in emphasis from dispositional to experiential constructs of cognitive style may provide the key to resolving the contradictory predictions advanced by extremism theory and context theory, and reconcile some of the conflicting research findings. Perhaps, at a dispositional level, extremists (or conservatives) are predisposed to their respective ideologies by personality traits such as intolerance of ambiguity. However, once extreme ideologies are adopted, experiential factors (e.g., the need to justify an extremist position) may lead to strategies of information gathering, which could produce increased levels of knowledge and rhetorical sophistication in these domains.

The construct of political sophistication is at present inchoate and needs to be clearly distinguished from dispositional constructs of cognitive style. It may then be possible to demonstrate that opposing theories are equally valid for different domains of cognitive style. As extremism theory may "work opinionation" (Stone, 1993), context theory may work sophistication. Opinionation and sophistication may be two different cognitive consequences of subscribing to extreme ideologies. Such findings, however, would not resolve the issue at hand, since psychological interest in the relationship between ideological beliefs and cognitive personality traits has been about disposition. Do the irrational traits of rigidity and intolerance of ambiguity predispose individuals to conservative beliefs, or to extreme beliefs of all kinds? Despite a lack of definitive evidence, Sidanius suggests that intolerance of ambiguity is associated with modal beliefs of all kinds.

This conclusion rests on clear theoretical and methodological distinctions between the style and content of cognition. In contrast to Rokeach and Adorno *et al.* (1950), Sidanius does not measure cognitive personality traits by means of ideological contents, or attempt to establish an isomorphic relationship between cognitive style and particular ideological beliefs. Instead, he maps the stable and consistent continuum of individual differences (the "mind-in-general") onto a psychological process of conformity-deviance, thereby extricating ideological beliefs from the equation. Because all societies over all historical epochs have beliefs which vary in their deviance, context theory is truly universal in its predictions. However, since any particular set of beliefs may be associated with "intellectual weakness" and irrationality, this universalism raises a number of critical problems. For example, the theory predicts that racist extremism, typical of contemporary neo-fascism, is sustained by self-confident, cognitively complex, and politically sophisticated individuals who are tolerant of ambiguity. This is a conclusion which Sidanius rejects, but which



the universalism of his theory allows.

Sidanius avoids these implications by making a special case of racist beliefs. He argues that racism is related to different psychological functions than all other beliefs. In contrast to the instrumental functions which sustain conformity to religious, economic and political, and other ideological beliefs, Sidanius (1984, 1988b; Sidanius & Lau, 1989) argues that ego-defensive functions underlie racist beliefs. He thus anticipates a linear relationship between racism and cognitive style — ensuring the irrationality of racism — but a curvilinear relationship between political and economic conservatism and cognitive style. Explicit reasons why racism secures exemption from instrumental functions are, however, not clearly spelled out. Sidanius & Lau (1989) merely claim that "empirical evidence" has demonstrated ego-defensive functions to underlie racist beliefs. However, empirical evidence has also suggested that political and economic beliefs may serve ego-defensive functions (Adorno *et al.*, 1950), and that expressions (and denial) of prejudice are influenced by impression management (Billig, 1988a, 1991; van Dijk, 1984, 1992; Wetherell & Potter, 1992). Moreover, Sidanius (1978b), himself, has found a curvilinear relationship between racism and cognitive complexity (see Appendix A)!

While Sidanius may have achieved Rokeach's first requirements, he too has not managed to escape the theoretical conundrum or provide a definitive model of the relationship between cognitive style and ideological beliefs. In part, this is due to a lack of theoretical and operational clarity in distinguishing between dispositional and experiential constructs of cognitive style. The main difficulties with context theory, however, are attributable to ambiguity between Sidanius' empirical findings, theoretical predictions, and (unacknowledged) political values. The theory makes explicit predictions, and cannot adequately account for the complex and varied pattern of relationships that Sidanius has uncovered. This ambiguity is compounded by introducing a different theory to explain the relationship between racist beliefs and cognitive style in a *post hoc*, unparsimonious, and theoretically bereft manner. As with any universal theory which divorces cognitive style from content, disquieting political implications need to be avoided. However, by reneging on a relative definition of racist extremism, Sidanius undermines the most fundamental assumption of context theory: the independence between cognitive style and content.

Despite the thoroughgoing universalism of his theory, Sidanius has not managed to escape the necessity to lay political critique. On the contrary, context theory, like its predecessors, reflects the values of its historical and cultural milieu. Firstly, Sidanius ensures that his theory would not justify racism. Secondly, the conformity-type model of cognitive irrationality reproduces contemporary notions of the healthy individual: the go-getter, non-conformist achiever who is

"free to choose", and can break free of the irrational bonds of society is heralded as an ideal (cf. Rose, 1989, part 4). It also reaffirms old ideas of the irrationality of the masses (Le Bon, 1896; Moscovici, 1985a). A further feature of Sidanius' work which reflects contemporary trends is his multidimensional understanding of conservatism and cognitive style. Even though he does not theorize individual variability, he accepts the possibility that personality traits are not unitary entities which pervade and colour all aspects of life. Nevertheless, Sidanius remains committed to a personality-based account of social attitudes. This is not the case with Phillip Tetlock, whose recent value pluralism theory has overturned traditional conceptions of cognitive style.

### Value Pluralism Theory

Tetlock (1983a, 1984, 1986; Tetlock, Bernzweig & Gallant, 1985; Tetlock & Boettger, 1989) has taken the theorizing of Rokeach and Adorno *et al.* (1950) in the opposite direction to Sidanius. He has rejected personality as the interface between cognitive style and ideological beliefs, has rejected a decontextualized account, and has reasserted an intimacy between the style and content of beliefs. He maintains that the cognitive style employed in any ideological thinking is determined by the beliefs under consideration and the ideological system within which they are being thought. This permits him to generate propositions regarding intra-individual variability in cognitive style, in addition to theorizing the relationship between cognitive style and ideological beliefs.

Tetlock's general, value conflict theory of cognitive style assumes that ideological values are often in conflict with each other, and, being cognitive misers, individuals prefer simple solutions to the trade-off between conflicting values. His predictions stem from Abelson's (1959) account of the manner in which individuals resolve cognitive dilemmas. When conflicting values are of unequal strength, simple cognitive styles are manifest as individuals "bolster" the dominant value and "deny" the lesser. However, when conflicting values are of approximately equal strength, individuals must turn to the more demanding strategies of "differentiation, integration, and transcendence" to achieve value trade-offs and reduce dissonance. Tetlock (1986) has provided experimental support for these assumptions. He found that students thought about ideological policy issues in more complex ways and were less confident in the correctness of their stand, when (a) the policy issue placed two equally important values into conflict, and (b) the two values were highly important.

Since different political issues implicate values which vary in both their relative and absolute

importance, the value conflict model provides a platform for predicting cross-content variability in cognitive style. A conservative may, for example, display a more complex cognitive style when deciding whether to raise personal tax in favour of the defence budget, than when deciding whether to raise tax for improved public health services. The former issue involves two equal, highly important conservative values, whereas the latter may be resolved simply by bolstering one value and denying the other. Thus, "Content and structure are closely intertwined" (Tetlock, 1986, p. 824).

Tetlock annexes Rokeach's (1973, 1979) two-value model of ideology to the value conflict theory in order to derive predictions regarding the nature of the relationship between radicalism-conservatism and cognitive style. According to this more specific, value pluralism theory, the major ideological movements of the twentieth century vary in the importance they attach to the basic, and often incompatible values of individual freedom and equality. Rokeach suggests that socialism values both freedom and equality whereas fascism values neither. Communism values equality by not freedom, while capitalism values freedom but not equality. The decreased cognitive complexity of extremists, therefore, lies not in their unique psychological properties, but in the nature of the ideologies which they defend. Extremist ideologies of the twentieth century tend to be monistic — preferring to bolster one value at the expense of others — in comparison with moderate ideologies which are pluralistic — that is, they recognise conflict between prioritized values.

Although Tetlock's conception of cognitive style has no psychodynamic overtones, his understanding of cognitive complexity is descriptively similar to tolerance of ambiguity. As a feature of monistic thinking, cognitive simplicity is intolerant of ambiguity since it denies conflict between incompatible cognitive elements and rigidly holds to only one side of an issue. In measuring cognitive complexity-simplicity, Tetlock must himself adopt a pluralist cognitive style for he must satisfy two conflicting values. On the one hand, cognitive style must be associated with particular ideological contents in order to assess variability over different content issues. On the other hand, however, cognitive style cannot be assessed by means of ideological contents (as the F and D scales had done) because personality functioning, the theoretical link between opinions and cognitive style, has been rejected. These two aims have been achieved by using the integrative complexity coding system to measure cognitive style. This coding scheme, originally developed to score the Paragraph Completion Test (Schroder, Driver & Streufert, 1967), assesses cognitive differentiation and integration as exercised in actual discourse. Thus, while cognitive complexity may be measured without scaling ideological opinions, it remains associated with the ideological contents under discussion.

Tetlock has employed the integrative complexity coding system to investigate the relationship between cognitive complexity and political beliefs of United States senators (Tetlock, 1983a), members of the British House of Commons (Tetlock, 1984), American supreme court judges (Tetlock, Bernzweig & Gallant, 1985), and Soviet traditionalists and reformers (Tetlock & Boettger, 1989). Unlike Sidanius, who offers a relativistic conception of extremism, Tetlock must sample genuine fascists, socialists, communists, and capitalists to capture ideological thinking which reflects their differential value trade-offs. This is well illustrated in the study of American senators, the results of which supported the predictions of Adorno *et al.* (1950). Tetlock (1983a) explained that no true socialists and communists were included in the sample, and the linear relationship reflected the decrease in complexity from political moderates to extreme conservatives which the value pluralism model predicts (see also Tetlock & Boettger, 1989).

The distribution of ideological beliefs of the members of the British House of Commons, in contrast, does range from extreme radical to extreme conservative. By coding interview data of these members (N=89), Tetlock (1984) found convincing support for his theory. Moderate socialists interpreted policy issues in a more complex manner than moderate conservatives, who, in turn, were more complex than extreme conservatives and extreme socialists. These results are inexplicable by authoritarianism and extremism theory, but are congruent with the predictions of value pluralism theory.

These findings, however, have not provided definitive support for value pluralism theory. Like all the quasi-experimental and correlational research in this area, Tetlock's work succumbs to a number of points of ambiguity (cf. Cook & Campbell, 1979). First, in interpreting cause and effect:

On the one hand, the value pluralism of a person's ideology may shape how he or she typically thinks about policy issues... On the other hand, one's cognitive style may shape the value content of one's ideology. Individuals who dislike ambiguity and cognitive inconsistency may be more attracted to monistic than pluralistic ideologies (Tetlock, 1984, p. 373).

Tetlock has addressed this problem by investigating ideology-by-issue interactions in cognitive style. Tetlock, Bernzweig & Gallant (1985) have shown that the relationship between cognitive complexity and radicalism-conservatism of supreme court judges varies in an interactive manner, depending on whether they are considering economic or civil rights cases. Such findings contradict all personality-based accounts which advocate cross-domain stability in cognitive style. By questioning the generality and stability of personality traits, ideology-by-issue interactions challenge the causal priority of personality.

Ideology-by-issue interactions do not resolve a second set of ambiguities associated with quasi-experimental designs. It cannot be certain that it is differences in ideological monism-pluralism, rather than some other factor, which accounts for the observed differences in cognitive complexity between ideological groups. It may, for example, be the "consistency" which minorities must communicate to be influential (Moscovici, 1976), which underlies their relative "cognitive simplicity". This problem is especially crucial since Tetlock does not theorize or attempt to measure the monism-pluralism of ideological groups. He merely offers the construct as a mediating variable to account for his results.

In addition to these methodological difficulties, there are a number of theoretical problems with Tetlock's theory. Firstly, Tetlock does not expand sufficiently on the nature of monism-pluralism, and the manner in which it accounts for a necessary relation between cognitive style and ideological content. In contrast to the detailed theorizing of authoritarianism by Adorno *et al.* (1950) and Rokeach, Tetlock does not explain the aetiology of monism-pluralism on an ideological level; for example, why capitalism is monistic and socialism pluralistic. Nor does he discuss the manner in which ideological monism translates to individual monism — e.g., how 'being a capitalist' produces simple styles of individual cognition — or how monism generalizes from the equality-freedom issue to other ideological issues. Instead, he leaves monism-pluralism untheorized and refers his readers to Rokeach (1973, 1979). This is wholly unsatisfactory because he generalizes Rokeach's two-value model to a theory of ideological style applicable to many different content domains, and shifts Rokeach's theory from a social to individual level of analysis, without explanation.

It seems as though Tetlock wants to suggest that monism-pluralism is a property of an ideological group which is immediately transferred to the thought processes of individual group members; fascists and communists are monistic, while socialists are pluralistic. This is evident from the methodological status of monism-pluralism. An isomorphism between individual monism-pluralism and ideological orientation is evident in a methodology which classifies individuals by ideological orientation and then assumes corresponding levels of monism-pluralism. However, since it has proved so difficult to define ideological groupings by a single linear continuum (Eatwell & O'Sullivan, 1989; Wright, 1987), the isomorphism between ideological orientation and the linear monism-pluralism continuum appears overly simplistic. What, moreover, is the nature of monism-pluralism? Can we expect different theoretical predictions with the increased complexity of the New Right (cf. Eatwell & O'Sullivan, 1989; Haste, 1992)? Are fascists monistic in all contexts? How does the property of a vague and diffuse ideological group (e.g., capitalists) enter the consciousness of individual members? Will monism-pluralism be equally

prevalent among followers and ideological elites, or are we to expect differences between lived and intellectual ideology (Billig *et al.*, 1988; Converse, 1964; Mannheim, 1960)? All these issues derive from a single source: an unarticulated notion of monism-pluralism which evades specification and measurement.

Finally, the value pluralism model and value conflict theory are somewhat at odds with each other. The general theory argues that cognitive style is variable within the individual as it is determined by different levels of value conflict aroused by various issues. In contrast, the value pluralism model suggests that ideologies may be classified as monistic or pluralistic. If individuals are variable, however, how is it possible to classify ideologies as monistic and pluralistic? Surely any ideological group will reflect the variability of its individual group members. In sum, Tetlock allows a personality-based conception to slip in through the back door by classifying individuals according to their ideological orientation and assuming that they reflect the monism-pluralism of their ideological group.

The full set of theoretical ambiguities discussed above reflects a strain between the particular and universal strands of Tetlock's theory. By arguing for individual variability, Tetlock is clearly opening the way for an anti-universalistic account of cognitive style, sensitive to content influences. However, universal assumptions enter the theory at a number of sites. First, Tetlock uses Abelson's (1959) congruity theory without taking cognisance of the criticisms directed at its universal aspirations. Individuals, Billig (1982, chap. 7; 1987) argues, do not always strive to resolve belief dilemmas, but may be unaware of, ignore, dismiss, or sometimes even invoke incongruity. Second, although Tetlock recognises cross-content variability in cognitive style, he ignores the impact of context. This slant stems from adopting a Rokeachian conception of "terminal" values, and will be discussed in detail later. Third, he treats monism-pluralism as a property of ideological groups without specifying possibilities for change over time or within group differences. This is related to the final, and most serious universal thread of his theory. He allows the ontology of the mind-in-general to slip in through a back door by focusing on individual differences in monism-pluralism as determined by ideological orientation.

These ambiguities do not originate in the tension between political critique and theoretical universalism which has plagued earlier theorizing. Tetlock is distinctly and self-consciously apolitical. He escapes the conundrum by disregarding a politicized psychology in favour of a "value-neutral value pluralism theory which simply attempts to explain the functional relationship between value conflict and cognitive coping responses" (Tetlock, 1994, p. 524). This value-neutral approach sits well with a recognition of individual variability in cognitive style since there

no longer exist grounds by which to label some individuals (or ideologies) less rational than others. Tetlock (1994; Tetlock & Boettger, 1989; Tetlock *et al.*, 1993) argues that both simple and complex cognitive styles may be functional in different contexts. Thus, the only critical potential Tetlock may muster is to identify non-functional or inappropriate situational responses.

Why then, does Tetlock revert to personality theory and individual differences when his recognition of variability favours an a-political science? The problem with a particularist approach to theory is that it simply does not constitute "science". If everyone is variable, not only is it impossible to derive predictions about the irrationality of their ideological orientation, but, for an individualistic science, it is impossible to derive predictions about anything. In other words, particularism cannot sustain the empiricist science to which Tetlock is committed. To achieve its goals of causal explanation (Hempel, 1965), an empiricist science requires a stable, atomistic ontology from which to base its predictions (Bhaskar, 1989b). Thus, despite arguing for individual variability in cognitive style, Tetlock later attempts to identify the personality correlates of cognitive complexity, and sketch "the types of people who are prone to integratively simple versus complex ways" (Tetlock *et al.*, 1993, p. 501). While this is a far cry from the notion that cognitive complexity continually varies as we think about different issues, it is "science", able to explain both the functional and dysfunctional situational behaviour patterns of integratively simple and complex individuals.

Despite the thoroughgoing ambiguities in his theory and his regress to the ontology of the mind-in-general, Tetlock's theorizing offers some significant developments over the earlier work. Most importantly, he recognises individual variability in cognitive style. This informs the manner in which he measures cognitive complexity: as a feature of actual discourse rather than a reified property of individual psychology. He thus provides theoretical and methodological alternatives to a personality-based approach to cognitive style. However, these insights are compromised by Tetlock's continued support for an empiricist psychology and its attendant theoretical universalism.

## **Conclusion: Against Universalism**

At this stage, all I would like to do is reaffirm Samelson's conclusion that the authoritarianism literature does not instill confidence in the postulate of a linear growth of scientific knowledge. The theory has changed in relation to shifting historico-political circumstances. Where Adorno *et al.* (1950) unearthed irrational cognitive styles on the Right, with the growing threat of

communism fostered by the Cold War, Shils, Eysenck, and Rokeach sought cognitive irrationality in the political extremes, both Left and Right. As the Cold War was drawing to a close, the 1980's witnessed a significant change in theory. An overriding concern with the critique of any particular ideological constellation is not to be found in the work of Sidanius and Tetlock. Research had become marked by "value-free empirical data-crunching" (Samelson, 1993) and a "political-controversy-avoiding bias" (Etheredge, 1994), with irrational individuals or situational responses the only possible object of critique.

What I have attempted to do, is make explicit the conceptual structure underlying theoretical change. If theory development has not been linear, approaching truth, neither has it merely been historically relative, mirroring changed socio-political conditions. On the contrary, I want to argue that the conceptual structure of authoritarianism mediates the gap between historical change and theory development (truth). Specifically, the potential for theoretical change is given by the mutually compatible and conflicting themes of political critique and theoretical universalism. Only when changed historical circumstances demand one value to be bolstered over the other, is it possible to re-solve tensions between universalism and political critique and develop new models of reality within the bounds of the conceptual structure. In the final chapter I will return to the issue of theory development, once sufficient progress has been made for an alternative model of theoretical change to be proposed. To conclude this chapter, I consider some reasons why theoretical universalism may not be a particularly fruitful avenue to pursue in rethinking cognitive style.

All four theories discussed above have subscribed, to varying extents, to a universalistic account of cognitive style. They have endorsed an empiricist ontology of the mind-in-general by developing law-like psychological and ideological principles on the basis of individual differences in cognitive style.

This empiricist ontology introduces two psychological assumptions: 1) that psychological laws are asocial and ahistorical, and 2) that individual psychological traits are stable and general, independent of content and context. These assumptions are linked theoretically to an empiricist philosophy of science, and are evident in psychological (scientific) practice. The first originates in attempts to establish universal psychological laws, which presume that "mankind is much the same at all times and places" (Hume, cited in Bhaskar, 1989b, p. 72). In research practice this assumption is evident in synchronic studies which seek *the* relationship between cognitive style and ideological content (cf. Gergen, 1973). The second assumption derives from the manner in which (Humean) causality is established. By seeking constant conjunctions at the level of an event



— as in a significant correlation between single measures of cognitive style and ideological beliefs — studies tend to screen out all possible intra-individual variability across context and content. Thus, at the level of the individual, theoretical universalism assumes a stable, atomized, and generalized psychology — with the (mistaken) properties of a natural scientific ontology — from which causal predictions may be established (Bhaskar, 1989a, 1989b). These two assumptions imply that cognitive style is a stable property of individual psychology, and that the continuum of individual differences in cognitive style is an ahistorical property of human psychology in general.

As has been argued, these two related assumptions of empiricist psychology have resulted in thoroughgoing tensions in the authoritarianism literature. On the one hand, the assumption of a generalized psychology has allowed researchers to ground political critique by arguing that certain ideological beliefs are causally related to irrational cognitive styles. However, the assumed trans-historical stability of this relationship has proved problematic as belief systems have changed, associating different beliefs with cognitive irrationality. Consequently, theorists have approached universalism by purging their accounts of all references to specific beliefs. This, in turn, has thwarted any attempt at political critique, because any particular set of beliefs could be associated with cognitive irrationality.

In retrospect, it appears as though attempts to ground political critique in an empiricist psychology have been spurious because the empiricist philosophy of science and its attendant ontology, "which promised truth through method and a unification of science", "now lies in disarray" (Gergen, preface to Sampson, 1983, p. v). Two levels of trenchant critique have brought about this state of affairs. The first concerns the validity of an empiricist ontology. Bhaskar (1975, 1986, 1989b) has argued that an empiricist ontology is derivative from its epistemology; empiricism defines being in terms of knowledge. Within the body of theory discussed above, this *epistemic fallacy* — based on Humean causality and representationism — has fostered a conception of trans-historical, cross-context, and cross-content stability of psychological traits. However, on the basis of his transcendental argument (to be discussed later), Bhaskar argues that the ontology of the social sciences is characterized by, "social relationship dependence of social structures, their praxis- and concept-dependence, and their relatively greater material time-space specificity or substantial geo-historicity (1989b, p. 185).

This sentiment has been echoed by psychologists:

While classical science demands that everything be studied as if it were matter in motion according to an absent God's pre-established laws, *persons* seem able on occasions to act from a belief, a mere *conception* of a law... Attempting to live according to laws

inevitably involves the judgement of other people (Shotter, 1974, p. 218, emphasis in original).

Similarly, Sampson (1983) has rejected the idea that human psychology functions according to universal laws because the "laws" of human behaviour are historical in nature. Humans act on conceptions of law, not by law. The essence of these critiques is that a human ontology is inherently praxis- and concept-dependent, being social, contextual, historical, and most importantly, relational (see also Gergen, 1973; Harré, 1983; Manicas & Secord, 1983). Instead of trying to determine universal laws based on the properties of psychology, these critics suggest the appropriate object of study is the conception of laws: the socially shared understandings by which humans make sense of the world and guide their behaviour (Gergen, 1985; Moscovici, 1988; Parker, 1992; Potter & Wetherell, 1987; Shotter, 1984, 1993a).

The discipline of psychology must take seriously this criticism, not as an alternative, but because, according to Séve (1975) and others, "homo psychologicus", the natural object of scientific psychology, "does not exist" (Bhaskar, 1989a; Billig, 1991; Shotter & Gergen, 1989; Stam, 1992). The mind-in-general is a "fantasized real" (Parker, 1992). Accordingly, the notion of a characteristic trait-like cognitive style, rooted either in personality or an ideological group, is untenable because human phenomena cannot be regarded as "thing-like" properties.

The second difficulty with theoretical universalism concerns its moral/political character. If by conservatism, one means resistance to change (cf. Wilson, 1973), then psychological theory, based on the ontology of the mind-in-general, tends to be conservative in its effects. Lucien Séve (1975) demonstrates the ideological nature of personality theory:

...the division of labour is not the result of individual differences, but on the contrary, individual differences result from the division of labour (p. 27).

Whereas the latter proposition compels social critique, a negation of the former requires a psychology of individual differences. These two ends are mutually exclusive, for by focusing on individual differences in political beliefs, "the collectivity is spared complicity" and social transformation is thwarted (Sampson, 1977, p. 779; 1981; Henriques, 1984).

Whatever the immediate political orientation of a personality-based theory of ideological irrationality, its broader political effects tend to be conservative. Even though the authors of *The Authoritarian Personality* harboured radical intent, by developing a theory of individual differences, they imply that by taking care of the irrational individuals — through a "personal and psychological" education — they could facilitate the eradication of prejudice (Horkheimer

& Flowerman, 1950).<sup>23</sup> Such reasoning is based on a universalist ontology of an ahistorical continuum of individual differences (the mind-in-general), and individualistic conception of social structure (Bhaskar, 1989a; Porpora, 1989). However, instead of inducing social change and a corresponding shift in the (emergent) kinds of psychology which would develop (cf. Volosinov, 1987a), they advocate correcting the irrational elements of the one extreme of the ahistorical mind-in-general (cf. Henriques, 1984).

For very good ontological and critical reasons, it would appear that an empiricist account of cognitive style, with its attendant theoretical universalism, needs to be rejected. A number of alternatives have recently been opened with the "turn to discourse" and "return of rhetoric" in social psychology. These promise to take seriously the relational, praxis- and concept-dependence of human ontology, and have offered new methods for studying psychological phenomena (e.g., Billig, 1987; Marková & Foppa, 1990; Shotter, 1993a). In addition, some strands of theory within this new paradigm have argued for a politically grounded, critical psychology (Parker, 1992). These alternatives may offer ways of resolving both the ontological and critical difficulties which have bedeviled the authoritarianism literature. It is toward such an account of cognitive style that the present thesis aims to contribute.

However, before embarking on this substantive task, it is essential first to explore the necessity for an anti-universalistic account of cognitive style. It is necessary to examine the empirical (as opposed to theoretical) validity of the universalistic ontology of the mind-in-general. The argument presented here has rested on theoretical claims that the psychological ontology is fantasized, and ultimately false. However, psychologists have argued that cognitive traits "seem to have much better temporal and cross-situational stability and influence than most social traits" (Mischel, 1973, p. 267; 1968, 1979). Such claims suggest that, for all intents and purposes, a universal ontology is appropriate for the study of cognitive style. Thus, before progressing toward an anti-universalistic conception of cognitive style, it is first necessary to explore the empirical requirement for such an approach.

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<sup>23</sup> To be fair to Horkheimer and Adorno, both of whom have argued for a society established on "objective reason" (Horkheimer, 1947; Horkheimer & Adorno, 1944), it must be remembered that *The Authoritarian Personality* was tempered for an American audience (cf. Jay, 1973). Nonetheless, a latent individualism is evident in their philosophy which decentred the role of the proletariat, resulting in the loss of any historically grounded agency of emancipation (bar the individual) (see Bhaskar, 1989b, chap. 7).

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## Measurement and theory of intolerance of ambiguity

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*...the visible [is] already enriched and saturated with all the complexity of thought and cognition.*  
(Bakhtin, 1986)

The hypothetico-deductive model of science is sustained by a Popperian account of scientific advance: Progress occurs, "especially when we are disappointed in our expectations...as a result of a clash between our theories and our observations" (Popper, 1963, p. 222). Since knowledge must pass through the "fires of logical and empirical testing", falsification ensures that science will advance toward truth (Kimble, 1989, p. 498). However, by recognising the theory-bound nature of observation, post-positivist philosophy of science has seriously questioned the degree to which observation may guide theory to truth (Feyerabend, 1975; Kuhn, 1970; Rorty, 1979). Theory is insulated from crucial test, for "the scientist seems rather to be struggling with facts, trying to force them into conformity with a theory he (*sic*) does not doubt" (Kuhn, 1977, p. 193).

According to Bhaskar (1986, 1989b), scientists need not even force facts into theory, since the ideology of empiricism ensures that the facts which emerge from scientific investigations (re)produce an empiricist ontology, and ensures that theory does not exceed certain bounds. The problem is that empiricism "tacitly or explicitly" defines reality "in terms of some specific human attribute, such as sense-experience" (Bhaskar, 1989b, p. vii). Ontology and epistemology are thus bound in a circular relationship which ensures that only certain theories can be sustained, regardless of falsification. Ironically, this means that, rather than functioning to advance scientific progress, observation may hinder scientific development/change. This occurs, especially when

there has been a "fixation of the position from which states of affairs are to be viewed" (Rommervelt, 1990, p. 94). Bhaskar therefore seeks to "reclaim reality". He adopts the role of a philosophical underlabourer, and assumes the Lockian project of "removing some of the rubbish that lies in the way to knowledge" (Lock cited in Bhaskar, 1989b, p. vii). This chapter assumes a similar task: to clear the ground so that it is possible to evaluate claims within psychology that "cognitive style is most consistent".

One problem with the empiricist model is that very often our conception of the world and our measurement of it mirror each other to the point that we become entrapped in what Danziger (1985) has called the "methodological circle". Methodology is not ontologically neutral, but "limits the kind of reality that can be represented in the products of scientific investigation" (Danziger, 1992, p. 310). This point is quite obvious; any procedure which is employed for observation (e.g., a race attitude scale), is finite (e.g., 10-item) and screens out much of what could be measured. Less obvious, though, is that measuring racism itself assumes that racism is quantifiable, can be recorded on an interval measurement scale, and subjected to parametric statistical tests (cf. Danziger, 1985).

Danziger's general argument has undesirable implications for psychology because, firstly, an empiricist methodology/technology has been institutionalized; and secondly, by defining reality in terms of sense experience, psychological phenomena have been defined in terms of the measurement technologies by which they are observed.<sup>1</sup> Consequently, rather than observation guiding theory to truth, methodological orthodoxy (therefore "methodolatry") has limited the kind of ontology available for study. Reality has been institutionalized. Danziger (1985, 1990, 1992) thus reiterates Bhaskar's critique of empiricism, and argues that any fundamental change in theory would require a fundamental change in methodology: a change which would release psychological phenomena from their empiricist form.

The methodological circle is evident in the literature under consideration. Consider the way in which measurement has incorporated ontological assumptions concerning the nature of cognitive style. Allport (1954), for example, defines cognitive style in universalistic terms, as a property of individual psychology: "the style of thinking that is characteristic of prejudice, is a reflection by and large of the prejudiced persons way of thinking about anything" (p. 377). Cognitive style is theorized as a stable individual trait which is generalized over content and context. Prejudice

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<sup>1</sup> Since empiricism defines being in terms of knowledge (i.e., commits the *epistemic fallacy*), Danziger's critique, like Bhaskar's, is aimed at the *ontic fallacy* — the ontologization of knowledge.

is argued to be only one manifestation of the deeper underlying "way of thinking about anything". Rather than being tested by research, these ontological assumptions have been built into measures of cognitive style. Rokeach (1956b), for instance, set about devising a measure of cognitive style which could be used to test Allport's theory. By the process of an "emptying operation", Rokeach developed a measure which could be applied to "thinking about anything". The stability and generality of cognitive style which Allport theorizes is thus incorporated into Rokeach's measurement instrument. By seeking individual differences in dogmatism and assigning each individual a single score to represent their characteristic cognitive style, measurement assumes cognitive traits to be stable properties of individual psychology.

Regardless of the outcome of any particular study which finds that prejudice is related to or unrelated to cognitive style, the underlying ontology upon which conceptions of cognitive style rest is never brought into question. That cognitive style is a stable property of individual psychology remain axiomatic. Thus, although we may become disappointed in our expectations, as Popper suggests, we don't necessarily become disillusioned about our reality. This is why the discipline could for years continue producing knowledge claims about an object which has recently been argued to be "fantasized" and "ultimately false" (Parker, 1992; Stam, 1990). Moreover, it is for this reason that a Bhaskaresque underlabouring is required to reclaim reality.

The assumption of individual stability and consistency in cognitive style is evident in the personality-based conceptions of cognitive style discussed in the previous chapter. The research undertaken to test these theories has embodied a theory of its own: by assigning a single score of cognitive style to each subject in order to denote his or her position along a continuum of personality types, such methodology assumes individual consistency. Since this thesis aims toward an anti-universalistic conception of cognitive style, it would be inappropriate to follow the conventional practice of reviewing all studies which have sought to confirm one or other of the theories discussed in the previous chapter. It is first necessary to establish whether cognitive style can be measured as a generalized trait.

We are, however, immediately confronted with a difficulty. The stability and generality of cognitive style is an empirical matter which must be evaluated by observation. However, following Danziger, it is necessary to be suspicious of possible ontological presuppositions built into measurement techniques. The chapter deals with this dilemma by first making explicit some of the ontological assumptions which have been embodied by measures of cognitive style. This is done by tracing the development of the construct of intolerance of ambiguity from its original formulation, and documenting the manner in which ontological assumptions have been

incorporated into different measurement procedures. This provides a platform from which to evaluate the different measurement procedures and reach a decision regarding the generality of intolerance of ambiguity. The review concludes that the available data does not warrant a firm verdict, and all evidence of individual variability has been assimilated by interactionist models of personality, leaving the trait thesis intact. Thus, the case of the generality of intolerance of ambiguity remains open. Finally, the chapter introduces an anti-universalistic conception of tolerance/intolerance of ambiguity which manages to bypass some of the empiricist assumptions which have bedeviled the literature.

Before embarking on this long, and at times tedious, detour, the chapter begins with a broader discussion of theoretical conceptions of cognitive style and intolerance of ambiguity. This discussion serves to introduce the theoretical understandings which have informed different measurement practices.

## Cognitive style and intolerance of ambiguity

### Cognitive style

Different conceptions of cognitive style have been applied to a wide diversity of psychological issues, including cognitive dissonance and attitude change (Harvey, 1963b), intelligence (Lee, 1991), field dependence (Witkin *et al.*, 1962), stress (Suedfeld, 1979), creativity (Barron, 1953), innovation (Kirton, 1985), and political decision making (Tetlock, 1979; Suedfeld & Rank, 1976). The different conceptions of cognitive style have included tolerance-intolerance of ambiguity (Adorno *et al.*, 1950; Frenkel-Brunswik, 1949), rigidity-flexibility (Rokeach, 1948), concreteness-abstractness (Lee, 1991; O'Connor, 1952; Rokeach, 1951a), complexity-simplicity (MacNeil, 1974; Sidanius, 1984, 1985; Tetlock, 1983a, 1984), and a number of dimensions of cognitive structure (Scott, 1963, 1969; Scott, Osgood & Peterson, 1979). Sometimes these constructs are used interchangeably, but often rigid distinctions are drawn between them.

The diversity of application and the variety of constructs frustrate attempts to treat the literature as a unitary field of study. Two general orientations can, however, be identified which have prevailed over two historical periods. Early studies of rigidity (Kounin, 1941; Lewin, 1935; Werner, 1946) and abstractness (Goldstein & Scheerer, 1941; Vygotsky, 1934) considered

cognitive style a feature of mental pathology, feeble-mindedness, and schizophrenia. Although the generality of cognitive traits was debated (cf. Kounin, 1941; Werner, 1946), they were commonly viewed as constitutional or as induced by organic pathology; they were associated with the "capacity level of the total personality" (Goldstein & Scheerer, 1941, p. 1). Since this capacity level was related to psychopathology and madness, "normal" individuals were introduced into research designs only as comparison groups. The historical break occurs with the work of Rokeach (1948) and Frenkel-Brunswik (1948a, 1948b, 1949), who for the first time treated cognitive style as a theoretical construct relevant to "normal" populations.

While this early work is not directly relevant to the present discussion, the assumption of the generality of cognitive style as well as its associated irrationality has influenced later conceptualization and measurement. Rigid and concrete cognitive styles have continued to be associated with irrationality, manifest not by absurd behaviour within the mental institution, but in prejudiced beliefs, "rigid categorizations", and other "faulty generalizations" (Frenkel-Brunswik, 1948a, 1948b, 1949). Also, a medical model has been inherited, where non-functional cognitive styles have been associated with psychopathology — intolerance of ambiguity was seen as a attribute of a "compulsive character" (Frenkel-Brunswik, 1949).

Frenkel-Brunswik's (1949) landmark paper identified two different theoretical understandings of cognitive style. The first approach originated in the traditions of Gestalt psychology and the psychology of cognition, and aimed to specify the "whole" character of the individual as reflected in typical ways of perception (e.g., Jaensch, 1938). In addition to theorizing the manner in which characteristic modes of perception reflected pervasive properties of cognition, a branch of this "perception-centred" approach also attempted to specify situational determinants (e.g., fear and conformity) of cognitive style (e.g., Murray, 1933). The second approach was strongly influenced by personality theory and was less concerned with situational determinants. While both orientations treated cognitive traits as relatively enduring characteristics of the individual, perception-centred theorists viewed these traits as "constitutional", and regarded them as "factors in the brain field" (Frenkel-Brunswik, 1949, p. 122). In contrast, personality-centred theorists argued that cognitive traits originated in emotional life and underlying psychological motivation.

Frenkel-Brunswik (1948a, 1948b, 1949, 1951; Frenkel-Brunswik & Sanford, 1945) promoted the personality-centred approach, and was responsible for integrating the findings of the two schools into a coherent theoretical framework. She used Fenichel's (1945) concept of "emotional ambivalence" to explain the trait-like nature of rigidity and intolerance of ambiguity. A deep-seated "love- and hate-cathexis toward the same object" was manifest in the inability to "face



ambivalences toward others", and a generalized tendency toward emotional, perceptual, and cognitive rigidity and intolerance of ambiguity (Frenkel-Brunswik, 1949, p. 115; 1951). Prejudice and its wide range of perceptual and cognitive correlates were seen as surface manifestations of the "ego defences" (Freud, 1937) by which authoritarians screened out threatening emotional ambivalence. Underlying emotional ambivalence was thus manifest as an absence of ambivalence — i.e., intolerance of ambiguity.

Although Frenkel-Brunswik was instrumental in theorizing the trait-like conception cognitive style, psychodynamic theory could accommodate individual variability. By proposing a psychodynamic typology of individual differences, Freud (1931) had established a foundation for conceptualizing cognitive style as a generalized personality trait. He argued that psychodynamic development produced distinct libidinal types, one of which was characterized by emotional ambivalence and ego-weakness which originated in conflict between id and superego impulses. Nonetheless, in contrast to this rather atypical paper, Freudian theory is renowned for respecting psychic contents when interpreting and explaining overt stylistic pathology (Fenichel, 1945). Unlike earlier theories of psychopathology which treated content as an epiphenomenon (Hamilton, 1974; eg., Kraepelin, 1919), Freud stressed a dynamic relation between the content of psychic conflict and associated stylistic defences; psychodynamic defences were seen to be activated only in the presence of threatening situations and cognitive contents. Thus, although Frenkel-Brunswik chose to theorize a trait-like conception of intolerance of ambiguity, she recognised possible individual variability, and consequently stressed the importance of empirical studies which investigated the generality of these traits.

A second conception of cognitive style has developed relatively independently of the psychodynamic model, and has informed the work of Sidanius and Tetlock. This cognitive-centred orientation dismisses the concept of emotional ambivalence, divests cognitive style of any reference to motivation, and theorizes cognitive style independently of cognitive content. This approach has its roots in the early perception-centred theory, and it views cognitive traits as pervasive features of an individual's constitution. Cognitive style is considered a formal, structural property of cognition which underlies all information processing (Harvey, 1963a; Harvey, Hunt & Schroder, 1961; Schroder, Driver & Streufert, 1967; Streufert & Streufert, 1978; Scott, 1963, 1969; Scott, Osgood & Peterson, 1979). Consequently, individual stability has largely been assumed by this school, and only by the late 1960's was possible variability recognised.

Cognitive-centred theory offers a phenomenological account of cognition which owes its

intellectual heritage to Lewin's (1935, 1936) field theory, Kelly's (1955) theory of personal constructs, and incongruity and dissonance theories (Festinger, 1957; Osgood & Tannenbaum, 1955). The self is theorized in terms of a duality: 1) as a conceptual system of meanings, contents, and beliefs, which 2) possesses a variety of learned structural properties such as concreteness-abstractness and complexity-simplicity. The metaphors used to describe the second component of the self are telling. By separating cognitive contents from style/structure, and suggesting that cognitive style shapes the processing of diverse information (meaningful contents) much like DOS allows the processing of different data (Stone, 1971), cognitive style is viewed as a formal, stable, and generalized property of individual psychology. Cognitive structure acts as a "filtering system" which develops independently of the emotive drives and beliefs of the individual (Harvey, 1963b; Hunt, 1963b, 1971; Schroder *et al.*, 1967).

According to this theory, cognitive style is a learned variable which develops through experience, training, or conditioning (Harvey & Schroder, 1963), and which is unrelated to emotional development (Suedfeld, 1971). Harvey *et al.* (1961; Harvey & Schroder, 1963; Schroder, 1971) proposed a four stage model of cognitive style development which endows the individual with stable "dispositional organizational tendencies" of cognition (Schroder, 1971, p. 268). According to this model, stylistic cognitive traits are derived from cognitive development which attains a particular level through a process of "arrestation" (Harvey *et al.*, 1961; Schroder, 1971). Unlike personality-centred theory, this account cannot establish a necessary relationship between the style and content of cognition because the psychodynamic motivational links are disregarded.

By theorizing an independence between the style and content of cognition, the cognitive-centred orientation proposes a universalistic conceptualization of cognitive style. As DOS provides an environment which may process a variety of software, cognitive style is a pervasive feature of individual psychology which structures any belief which the individual may entertain. Cognitive style, much like the construct of intelligence, is viewed as a formal property of individual psychology (in the brain field) which has attained arrestation at a certain level. This implies a generalized cognitive style since all the various contents which an individual encounters are processed by the same structure.

Despite the important theoretical differences which exist between the cognitive-centred and personality-centred approaches to cognitive style, they are similar in many respects. Descriptively, researchers in the two schools frequently refer to the same cognitive traits (e.g., concrete thinking). Where they refer to different traits, these are often logically compatible. Intolerance of ambiguity and cognitive complexity, for example, both entail the use of a few,

broad, rigidly defined cognitive categories. Additionally, the bipolar cognitive traits have similar evaluative connotations. Rigidity, intolerance of ambiguity, and cognitive simplicity are all viewed as relatively non-functional in comparison with their opposites. Finally, both orientations originate from a similar history in psychology, and are unified in their metatheoretical alignment. Both have been defined in opposition to behaviourist psychology, and promote a S-O-R model of the relation between environmental stimuli (S) and behavioral response (R). Non-functional irrationality stems from psychological properties (O), and is manifest in the disjunction between external and internal reality. Whereas Frenkel-Brunswik explains the disjunction in terms of psychodynamic defences, cognitive-centred theorists explain it in terms of structural resistance to cognitive change (i.e., "resistance to accommodation").

Although most of the recent research has been concerned with constructs derived from the cognitive-centred, learning perspective, the present review will focus on intolerance of ambiguity, a construct associated with psychodynamic formulations of cognitive style. The reasons are twofold: first, on purely practical grounds, the cognitive style literature is too large to be considered in any detail in a single chapter; second, intolerance of ambiguity is a construct with potential to negotiate a way out of the universalistic conceptions of cognitive style. Unlike the traits of information processing, intolerance of ambiguity is not a formal property of individual cognition. Originally, the concept was necessarily associated with particular, emotionally threatening contents. As such, the assumption of generality is not as firmly tied to intolerance of ambiguity.

## **Intolerance of ambiguity**

Intolerance of ambiguity is a concept that has been widely used by social psychologists for over 40 years, but whose meaning remains unclear. Originally coined by Frenkel-Brunswik (1948a, 1948b, 1949, 1951, 1954), intolerance of ambiguity was seen as "one of the basic variables in both the emotional and the cognitive orientation of a person toward life" (Frenkel-Brunswik, 1949, p. 113). Not only did intolerance of ambiguity impact on the perceptual, emotional, and cognitive aspects of individual functioning, but it was seen as relevant to the individual's orientation toward life. The construct was associated with personal and social identity as well as political beliefs.

Being a concept which straddles such a wide range of individual and social functioning, intolerance of ambiguity has been notoriously difficult to define (cf. Altemeyer, 1981; Chown,

1959; Millon, 1957). Researchers have typically seized upon and operationalized one or another of the criteria outlined by Frenkel-Brunswik, correlated this with some criterion, and proclaimed to have verified or falsified the idea that intolerance of ambiguity is basic to an individual's orientation toward life. It is not surprising, therefore, that a multitude of contradictory findings have been generated, and that, much like the theory of authoritarianism, researchers have wearied themselves and have eventually forsaken the concept of intolerance of ambiguity altogether. Thus, the conclusion today remains the same as that reached by the last major conceptual analysis of the construct: "Frenkel-Brunswik's theory of intolerance of ambiguity has never been adequately put to the test" (Bochner, 1965, p. 400).

In an attempt to rectify this situation, Bochner (1965) outlined the full set of primary defining characteristics of intolerance of ambiguity. These included: (a) rigid dichotomizing into fixed categories — "need for categorization", (b) seeking for certainty and avoiding ambiguity — "need for certainty", (c) inability to allow for the co-existence of positive and negative features in the same object, such as good and bad traits in the same person, (d) acceptance of attitude statements representing a rigid white-black view of life, (e) a preference for the familiar over the unfamiliar, (f) a positive rejecting of the different or unusual, (g) resistance to reversal of apparent fluctuating stimuli, (h) the early selection and maintenance of one solution in a perceptually ambiguous situation, and (i) premature closure.

Bochner's critique berated the logical errors in the operational definitions of intolerance of ambiguity and the poor psychometric properties of these measures. He found examples of logical errors in test construction in the work of Hamilton (1957) and Draguns and Multari (1961). These studies had operationalized intolerance of ambiguity by assessing subjects' reactions to ambiguous stimuli. Hamilton (1957), for example, presented subjects with a series of 12 drawings which differed in ambiguity: Three were clearly cars, three were clearly houses, and three were indefinite, containing features of both houses and cars. Subjects were required to sort the pictures into three categories: (a) house, (b) car, (c) either house or car (i.e., can't decide). Intolerance of ambiguity was indexed by the number of responses in the "can't decide" category, with fewer items in this category indicating greater intolerance of ambiguity. Bochner objected to this definition since it satisfied some of the nine defining characteristics of intolerance of ambiguity, but contradicted others. Fewer "can't decide" responses suggested a need for closure and categorization and was thus consistent with the characteristics (a), (h), and (i) above. It however contradicted (b), the need for certainty, which would require more "can't decide" responses from individuals who would not commit themselves to a position unless absolutely certain. In addition to these logical errors, Bochner (1965) criticized the poor psychometric properties of these

measures. Many of the tests had "markedly skewed distributions and distorted means", properties which do not satisfy Pearsonian assumptions, and which "bias the results towards obtaining insignificant (*sic*) correlation coefficients" (Bochner, 1965, pp. 396-397).

Bochner's critique is legitimate, and other measures of cognitive style have also been criticised for their logically incompatible definitions (Neuman, 1981), and for their poor psychometric properties (Christie, 1993). However, the most fundamental confusion has arisen due to misinterpreting the nature of Frenkel-Brunswik's research programme, and not her definition of intolerance of ambiguity. In another context, Hopf (1993) points out that Frenkel-Brunswik's research:

...must be pictured as a combination of theoretically guided research and exploratory, descriptive analysis...[which] served to verify previous hypotheses and to develop new ones (p. 123).

Hopf continues by suggesting that Hyman & Sheatsley's (1954) celebrated critique of *The Authoritarian Personality* "misses the point" of the exploratory nature of the study (see also Samelson, 1993, p. 35). Bochner (1965) also misses this point, and as a result, instead of clarifying intolerance of ambiguity, he contributes to the fundamental sources of conceptual and theoretical confusion.

This confusion is evident in his nine defining characteristics of intolerance of ambiguity. All nine are treated as having equal theoretical and empirical status; however, some were derived from the exploratory and descriptive prong of Frenkel-Brunswik's research programme, while others were developed to test theory in a more deductive manner. Frenkel-Brunswik (1948b) derived the primary defining characteristics of intolerance of ambiguity from theoretically guided comparison (description) of prejudiced and non-prejudiced children. By means of clinical interviews with 120 "extremely prejudiced and unprejudiced" children (selected from a sample of 1500) and their parents she established that some subjects were able to tolerate emotional ambiguities better than others. These emotional ambiguities were revealed in the manner in which the subjects spoke about their parents, authorities, and values. Intolerance of ambiguity was argued to be a central characteristic of prejudiced talk, and was defined in terms of "attitudinal variables", concerning:

...the recognition, by one and the same individual, of any actual coexistence of positive and negative features in the same object (Frenkel-Brunswik, 1949, p. 115).

Originally, therefore, intolerance of ambiguity was seen as an evaluative attitudinal variable, manifest in the level of ambivalence which subjects displayed in their talk about social "objects". Individuals who were classified as rigid and intolerant of ambiguity evaluated "middle-class values, parents, outgroups, and people in general" either by "total acceptance" or "total rejection"

rather than displaying "a conscious coexistence of acceptance or rejection" (Frenkel-Brunswik, 1951, p. 395).

Intolerance of ambiguity was primarily an emotive variable which was related to underlying psychodynamic conflict, and which was manifest in the evaluative-cognitive phenomena of "total acceptance" or "total rejection". It was a Manichean orientation which was identified in an individual's conception of values, social groups, authorities, and other people. It certainly was associated with a cognitive style which was predisposed to a black-white categorization of good and bad traits. However, the original description (definition) of intolerance of ambiguity referred not to "objects", "solutions", and "stimuli" as Bochner reports, but to values, groups and authorities. Moreover, evaluation was central to Frenkel-Brunswik's definition. Bochner, however, includes among his nine primary characteristics such non-evaluative criteria as (g) resistance to reversal of apparent fluctuating stimuli and (h) the early selection and maintenance of one solution in a perceptually ambiguous situation.

It is not difficult to trace the origin of these asocial and non-evaluative definitions of intolerance of ambiguity. They were derived from the deductive aspects of Frenkel-Brunswik's research programme, and from other research which attempted to test her theory. Frenkel-Brunswik theorized that the social manifestations of intolerance of ambiguity originated in a generalized personality trait. Consequently, her "prime concern" was to:

...study the generality or lack of generality of the personality patterns involved, that is, the readiness to spread from one area of manifestation to another (Frenkel-Brunswik, 1949, p. 112).

In order to achieve this objective, the "attitudinal variable" had to be translated into operationalizable constructs relevant to diverse realms of individual functioning. Since intolerance of ambiguity had been identified as a social and evaluative phenomenon characteristic of ethnocentrism and authoritarianism, the obvious way to examine its generalizability was to construct asocial and non-evaluative measures and to test whether these were associated with the social and evaluative expressions of intolerance of ambiguity. These measures typically included Gestalt fluctuating stimuli (Jones, 1955), and solutions to ambiguous arithmetic problems (Rokeach, 1948). Unfortunately, since researchers had not distinguished sharply enough between the descriptive and deductive aspects of Frenkel-Brunswik's research programme, these asocial and non-evaluative definitions of intolerance of ambiguity gradually became accepted as the defining characteristics.

This is clear from Bochner's (1965) own definition of intolerance of ambiguity. Bochner collected 39 "rocks" of varied size, angularity, porosity, colour, and texture from Waikiki beach. He then

asked subjects to put the rocks into "as many or as few categories as [they] thought necessary" (p. 398). Intolerance of ambiguity was indexed by the use of more categories and longer categorization time. What relationship does this asocial and non-evaluative task have with ethnocentrism? Bochner does not say. More telling, however, is the fact that ethnocentric individuals, and those intolerant of ambiguity, derived their certainty from dichotomous categorizations into good and bad (ingroup and outgroup), and not from employing numerous categories (Adorno *et al.*, 1950; Frenkel-Brunswik, 1949).<sup>2</sup> Thus, rather than clarifying the definition of intolerance of ambiguity, Bochner (1965) has contributed to the ambiguity of the construct. This resulted from confusing the descriptive and deductive aspects of Frenkel-Brunswik's work, thereby *assuming* intolerance of ambiguity to be a generalized individual trait (from ethnocentrism to rock classification), and consequently defining the construct in an asocial and non-evaluative manner.

Here we stumble upon the methodological circle. As discussed in the previous chapter, in attempting to construct universal theories of the relationship between cognitive style and ideological beliefs, theorists gravitated toward splitting the style of cognition from cognitive content. Similarly, to investigate the generalized nature of intolerance of ambiguity, researchers appropriated the concept in an asocial and non-evaluative manner, divorced it of content, and treated intolerance of ambiguity as a formal property of individual functioning. Both the theory and the measures employed to test it assume a universalistic ontology. Intolerance of ambiguity was reduced to a formal individual property which can be conceptualized and measured independently of emotions, social context, and cognitive content. Intolerance of ambiguity was assumed to be a pervasive property of individual functioning that influenced not only the evaluation of social groups, values and authorities, but also cognitive operations with rocks and arithmetic tasks. Frenkel-Brunswik never conceptualized intolerance of ambiguity in such a manner. Her "prime concern" was to *investigate* its generality.

## Generalized intolerance of ambiguity?

Most of the research which has investigated the generality of intolerance of ambiguity has employed asocial and non-evaluative measures. These studies have taken two forms. A first group

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<sup>2</sup> A further methodological problem with Bochner's study is that the number of categories employed and the time taken to categorize are dependent upon each other. Therefore, besides a generalized personality trait linking the two indices of intolerance of ambiguity, a positive correlation is expected, since those who employ more categories are also expected to take longer time deciding on which category to place each rock.

of researchers has assumed ethnocentrism and authoritarianism to be social manifestations of the personality trait of intolerance of ambiguity, and have sought associations between these measures and other asocial and non-evaluative expressions. A second group has examined the association between different operational measures of the more personal expressions of intolerance of ambiguity. The former approach will be reviewed first. The discussion will be structured according to the manner in which intolerance of ambiguity has been measured. Intolerance of ambiguity has been operationalized by (a) gauging reactions to ambiguous stimuli, (b) scaling procedures, and (c) assessing evaluative categorization. Finally, studies which have sought correlations between these three operational techniques will be discussed.

## Reactions to ambiguous stimuli

Intolerance of ambiguity has been associated with performance at ambiguous tasks and liking of ambiguous situations. Accordingly, many studies, like that of Bochner (1965), have measured the trait by gauging individual reactions to ambiguous stimuli. This experimental paradigm was instituted by Frenkel-Brunswik (1949), as part of her deductive empirical programme. She commenced with the question: "are those incapable of conflicting emotions — or of conflicting value judgements — generally incapable of seeing things in two or more different ways?" (p. 120). To answer this question, she divided her subjects according to their manifest ethnocentrism — their "tendency to dichotomize in the social field on the basis of external characteristics" (p. 123) — and then assessed their performance on a number of tasks, "free from emotional and social content" (p. 126). She presented the subjects with a series of pictures which started with a dog, but which gradually transformed into a cat. Subjects were asked to identify each of the pictures. Although Frenkel-Brunswik did not report inferential statistics (or sample size), she found that the prejudiced group "were reluctant to give up the original object about which they had felt relatively certain" (p. 128). She concluded that these and other similar findings suggested that intolerance of ambiguity was a generalized personality trait, related to a need for certainty. The trait could be traced from its social and evaluative manifestations to other asocial and non-evaluative performance.

A number of different techniques have been employed to assess intolerance of ambiguity by gauging reactions to ambiguous stimuli. Three of these have been most commonly pursued. The Rorschach test and the autokinetic illusion, like Frenkel-Brunswik's cat-to-dog test, have been used to evaluate performance at ambiguous perceptual tasks. The Azzageddi test records both performance at, and liking of ambiguous auditory stimuli.



Eriksen & Eisenstein (1953) presented 33 "randomly selected undergraduate students" with 50 Rorschach concepts which were selected so as to represent all Rorschach scoring categories. The experimental procedure consisted of pointing out various Rorschach concepts, and asking: "Could this be a \_\_\_\_?". Intolerance of ambiguity was indexed by the number of 'no' responses offered by subjects. These responses were argued to reflect a need for certainty in the face of ambiguity. Intolerance of ambiguity was found to be unrelated to ethnic prejudice as measured by a modified version of the California E scale ( $r = .19$ ,  $N = 33$ ).

The Azzageddi test is comprised of auditory stimuli which take the form of passages of spoken communication containing meaningful and coherent statements which are intermingled to form contradictory and irreconcilable statements and ideas, much like a schizophrenic 'word-salad'. After listening to each of eight such passages, subjects are required to recall as many statements as possible. The total number of statements out of a possible 112 which are recalled correctly acted as a criterion of tolerance of ambiguity. In addition, subjects are required to rate, on six-point scales, (a) the degree of ambiguity present in the passages, and (b) their personal liking or disliking of the passages. Davids and Eriksen (1957) used a sample of 48 naval cadets to examine the relationship between the Azzageddi test and the 30-item California F scale. They found nonsignificant associations ( $\alpha = .10$ ) between the F scale and the number of statements recalled ( $r = -.10$ ), the liking of the passages ( $\chi^2 = 1.02$ ), and the degree of perceived ambiguity ( $\chi^2 = .87$ ).

These negative findings echoed the results of two earlier studies performed by Davids. Using 20 male undergraduates, Davids (1955) found the F scale to correlate non-significantly ( $\alpha = .10$ ) with the Rorschach test ( $r = .10$ ) and with recall on the Azzageddi test ( $r = -.01$ ). Authoritarianism was also unrelated to liking of the ambiguous passages ( $\chi^2 = .81$ ) and their rated ambiguity ( $\chi^2 = 0$ ). In order to explain these findings — which contradicted the predictions of Adorno *et al.* (1950) — Davids (1956) replicated the study with sample of 22 undergraduates which were "well-matched" with the earlier sample. In this instance, though, the study was performed under "ego-involving" conditions. Here, Davids was drawing on Brown's (1953; also Christie, 1993) (psychodynamic) hypothesis that the relationship between authoritarianism and cognitive style is conditional on ego-involvement. To achieve ego-involvement, Davids interviewed subjects individually under the guise of selecting suitable candidates as prospective employees. The interviews were conducted in the psychologist's office and a "formal and serious attitude" was maintained throughout. In contrast to Brown's hypothesis, authoritarianism was not significantly ( $\alpha = .10$ ) associated with the Rorschach test ( $r = .30$ ) or with recall to the Azzageddi test ( $r = .10$ ). Once again, authoritarianism was unrelated to liking of the ambiguous

passages ( $\chi^2 = .74$ ) or their rated ambiguity ( $\chi^2 = .19$ ). Although the stronger associations under ego-involving conditions were suggestive, Davids concluded that his findings failed to confirm the predictions of Adorno *et al.* (1950).

In a later review of his work, Davids (1963) concluded that "subjects who are high on authoritarianism were not found to be high on rigidity and intolerance of ambiguity" (p. 160). This conclusion seems to be true of most studies which have operationalized intolerance of ambiguity by gauging reactions to ambiguous stimuli.<sup>3</sup> Martin (1954), using different measures of intolerance of ambiguity at both interpersonal and personality levels, also failed to verify the predictions of Adorno *et al.* (1950). Caution, however, needs to be exercised in interpreting these findings. In both of Davids' studies, the indices of intolerance of ambiguity were not significantly associated with each other. This suggests that these tests either do not both measure intolerance of ambiguity, or that auditory and perceptual intolerance of ambiguity are independent. In addition, the small, heterogeneous, and unrepresentative samples employed do not instill confidence in the findings.

In contrast to Davids' findings, reactions to the ambiguity of the autokinetic illusion have typically been associated with authoritarianism. Block & Block (1951) hypothesized that, due to their need to structure ambiguous situations, high-scoring ethnocentric subjects would achieve stable norms in the autokinetic illusion faster than low-scoring subjects (cf. Frenkel-Brunswick, 1948b). The Blocks found that those subjects who did not achieve a stable norm in 100 trials ( $N = 18$ ) were less ethnocentric than those who did achieve a stable norm ( $N = 47$ ) ( $F = 5.58$ ,  $p < .01$ ). Millon (1957) replicated this study, but used the California F scale rather than the E scale. He found a "clear-cut" relationship between authoritarianism and the speed at which subjects established norms ( $F = 10.77$ ,  $p < .001$ ,  $N = 69$ ). Taft (1956) informed subjects ( $N = 36$ ) that the autokinetic effect was an illusion, and scored intolerance of ambiguity by measuring the degree to which subjects then reported seeing no movement. Intolerance of ambiguity was associated with a Bogardus-type measure of ethnocentrism ( $p < .05$ ). In a series of studies, Harvey and his associates also found authoritarianism to be associated with different kinds of performance at the autokinetic illusion which reflect a need to structure novel stimuli (see Harvey, 1963b). Indeed, Harvey & Rutherford (1958) reported correlations of .90 and .95 between the F scale and speed with which subjects saw the light moving under conditions where they were either praised or attacked for their performance. Altemeyer (1981), however, reports how he twice failed to replicate these impressive findings under either "praise" or "attack" conditions.

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<sup>3</sup> But see Siegel (1954) and McAllister & Anderson (1991) for an opposing opinion.

In sum, research which has operationalized intolerance of ambiguity by gauging performance at, or liking of ambiguous stimuli has not yielded consistent support for the relationship between authoritarianism and intolerance of ambiguity. These findings suggest that intolerance of ambiguity may not be generalized from its social expression (i.e., ethnocentrism and authoritarianism) to other areas of personal functioning. Studies which have employed the autokinetic illusion have had more success than those which have used the Rorschach and the Azzageddi tests. Even with the autokinetic illusion, though, results have been equivocal. Besides the negative findings reported by Altemeyer, researchers have typically employed different aspects of performance as indices of intolerance of ambiguity. This makes assessment of the findings difficult because it has commonly been found that different indices of performance are unrelated to each other (Kenny & Ginsberg, 1958), and that those which are related to authoritarianism change from study to study (cf. Millon, 1957; Taft, 1956).

The difficulty in interpreting these findings highlights one of the most fundamental problems associated with experimental measures of intolerance of ambiguity: scores on each measure are specific to the task at hand. Moreover, the lack of association between many of these measures (Kenny and Ginsberg, 1958), suggests that the task-specific nature of the measures outweigh any commonalities they have in assessing the personality trait of intolerance of ambiguity. It is for this reason that researchers turned to scaling intolerance of ambiguity.

## Scaling procedures

The first scale designed to measure intolerance of ambiguity was developed by Walk (1950), and published by O'Connor (1952). This eight-item measure was scored on a seven-point Likert-type scale which included both positively and negatively worded items. The items were designed to reflect uncertain and ambiguous situations and events.<sup>4</sup> O'Connor (1952) found the Walk scale to be positively associated with California E scale among 57 undergraduates ( $r = .55, p < .05$ ). Similarly, Kenny and Ginsberg (1958) found that the Walk scale correlated significantly with a 12-item measure of authoritarian submission among a heterogeneous sample of 76 volunteer female adults ( $r = .57, p < .05$ ). Kelman & Barklay (1963) investigated the relationship between the Walk scale and the California F scale among a sample of 282 "Negro college freshmen". The significant correlation ( $r = .43, p < .001$ ) among this homogenous sample was attributed to

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<sup>4</sup> Examples of items include: "There is more than one right way to do anything" and, "The best leaders give specific enough instructions so that those under them have nothing to worry about".

dispositional factors rather than differential opportunities to expand breadth of perspective as may have been present among heterogeneous samples.

These consistent findings suggest that social and evaluative expressions of intolerance of ambiguity may be traced down to a basic personality trait. In none of the three studies, however, was scale reliability reported. This is a crucial omission, for if intolerance of ambiguity is a generalized personality trait, the scale items should cohere in a unidimensional manner. When reliability was eventually investigated, the Walk scale was found "to have virtually no internal consistency ( $KR-20 = .08$ ,  $N = 128$ )" (Ehrlich, 1965, p. 591). Ehrlich also reported the inter-item correlation matrix of the Walk scale for a second sample ( $N = 88$ ). These correlations were "consistently low, predominantly non-significant, and in one third of the cases negative" (p. 591). Clearly, the Walk scale is not homogeneous and cannot therefore be viewed as a measure of a generalized trait of intolerance of ambiguity. What then can account for the consistently significant correlations between the Walk scale and measures of authoritarianism? Ehrlich (1965), preempting later critique of scaling measures of intolerance of ambiguity, suggested that "the content of some of the [Walk] scale items does bear a striking similarity to various items in the F and E scales" (p. 593). Thus, scale artifacts rather than dispositional factors may have been responsible for the correlations between the Walk scale and the F and E scales. Perhaps conservative individuals endorsed the conservative items of both the Walk scale and the F and E scales.

Three other scales measuring intolerance of ambiguity have been developed, and have been shown to possess improved psychometric properties. The Budner (1962) scale, Rydell-Rosen scale (Rydell & Rosen, 1966; MacDonald, 1970), and Norton (1975) scale are all measures of intolerance of ambiguity which possess adequate stability and internal consistency coefficients. The Budner scale and Norton scale are scored by a Likert-type format, whereas the Rydell-Rosen scale contains dichotomous true-false response categories. All three measures include strikingly similar content, which is also comparable to that encompassed by the Walk scale. The scales are composed of items which refer to personal reactions to ambiguous and uncertain situations and events.<sup>5</sup> Due to these commonalities, and the fact that the Budner scale has most often been employed as a research instrument, only the Budner scale will be considered here.

Following the deductive facet of Frenkel-Brunswik's research, Budner (1962) defined intolerance of ambiguity as "the tendency to perceive ambiguous situations as sources of threat" (p. 29). He

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<sup>5</sup> The Budner scale is reported in Appendix C, Section 3, items 11-26.

proposed three such ambiguous situations — completely new situations, complex situations, and contradictory situations — and argued that individuals will react to such situations at either a phenomenological (evaluation or feeling) or an operative (behavioral) level. Budner developed his measure of intolerance of ambiguity so that each item tapped a particular mode of response to a particular type of ambiguous situation. He then examined the validity and reliability of the scale on 17 diverse samples. The mean coefficient alpha for the scale over all samples was rather low ( $\alpha = .49$ ), but the test-retest coefficient for one sample ( $N = 15$ ) was adequate ( $r_{tt} = .85$ ). Using a sample of 171 medical students, Sobal & DeForge (1992) have recently reported an alpha coefficient of .64, and a test-retest correlation of .64 for the scale.

Budner (1962) established the criterion-related validity of his scale by finding significant correlations between it and three other measures of intolerance of ambiguity: the Walk scale, the Coulter scale (in Eysenck, 1954), and an unpublished Princeton scale. Budner scores also correlated significantly with three independent ratings of intolerance of ambiguity, made by a clinical psychologist, a teacher, and a sociology student, on the basis of a one page autobiography ( $N = 15$ ). Further validity criteria have been reported by Sidanius (1988a), who concluded that the Budner scale possesses "the most consistent degree of construct validity" of all measures of intolerance of ambiguity (p. 312).

Budner (1962) examined the relationship between his measure of intolerance of ambiguity and the Christie *et al.* (1958) balanced F scale, on nine different samples ( $35 \leq N \leq 79$ ). All associations were in the expected direction, and six of the nine reached significance ( $\alpha = .05$ ). Judging by the average correlation between authoritarianism and intolerance of ambiguity ( $r = .32$ ) over all nine samples, Budner (1962) concluded that "these are two complex, overlapping constructs" (p. 41). Subsequent research has largely supported this conclusion. The Budner scale has been found to correlate significantly with: (1) two different balanced F scales ( $r = .28, p < .005, N = 113$ ) (Vannoy, 1965) and ( $r = .51, p < .05, N = 134$ ) (Ray, 1980a), (2) Kohn's (1974) rebellion-authoritarianism scale ( $r = .67, p < .01, N = 62$ ), (3) dogmatism among two samples of psychology students ( $r = .21, p < .01, N = 177$ ), ( $r = .20, p < .01, N = 157$ ) (Feather, 1971), among a pro-religious sample ( $r = .38, p < .05, N = 27$ ) (Feather, 1967), and a "well-balanced" English sample (Kirton, 1981), and (4) the Rigby-Rump attitude toward authority inventory ( $r = .32, p < .05, N = 178$ ) (Rigby & Rump, 1982). Although the strength of these correlations are weak to moderate, on balance, the Budner scale does appear to be consistently associated with social expressions of intolerance of ambiguity.

Sidanius (1978a, 1985) has investigated the relationship between the Budner scale and racism and

authoritarian aggression among a sample of 195 Swedish high school students.<sup>6</sup> His work constitutes an advance over previous studies as he has addressed one of the major criticisms of the scale: the low internal consistency of the scale suggests item heterogeneity and scale multidimensionality. Instead of treating intolerance of ambiguity as a unidimensional construct, Sidanius (1978b) has uncovered seven underlying factors of intolerance of ambiguity (see also Furnham, 1994). Sidanius (1978a) found that the total Budner scale correlated significantly with racism ( $r = .28, p < .01$ ) and authoritarian aggression ( $r = .19, p < .05$ ). In addition, authoritarian aggression was associated with Budner Factor 1 [intolerance of uncertainty] ( $r = .34, p < .0002$ ) and Factor 2 [uninterpreted factor] ( $r = -.16, p < .05$ ). Racism was correlated with Budner Factor 6 [intolerance of ambiguity] ( $r = .31, p < .01$ ) and Factor 7 [need for the familiar] ( $r = .25, p < .01$ ).<sup>7</sup>

Sidanius' findings leave one rather bewildered. It appears as though there is some relationship between intolerance of ambiguity and racism and authoritarianism, but only for portions of the Budner scale. Moreover, there is little consistency regarding which Budner factors are related to racism and which are related to authoritarianism. Why are different Budner factors associated with different expressions of social intolerance? A close reading of Sidanius' work suggests that he views these factors as subtraits of the more general trait of intolerance of ambiguity. However, unlike authoritarianism, which is also comprised of subtraits (Altemeyer, 1981; Duckitt, 1989; Stone *et al.*, 1993), Sidanius offers no theoretical reason why these factors should be considered together in the form of a scale, and why they then do not hang together as a unidimensional personality trait. The vague theoretical status of intolerance of ambiguity raises doubts concerning the validity of the Budner scale.

While the scale or at least parts of it, may be measuring something, we do not know precisely what it does measure (Ward, 1988, p. 317).

Not much confidence can be given to the names that Sidanius has given to the factors. Even a cursory inspection of the scale content will convince one that just about any item could be classified under any of the naming categories.

Overall, the Budner scale has consistently been found to correlate with various measures of authoritarianism, dogmatism and ethnocentrism. Since the Budner scale was developed as a personality measure along the deductive lines of Frenkel-Brunswik's research, these findings suggest that intolerance of ambiguity is a generalized personality trait which may be traced from a personality disposition which finds uncertain, complex and novel situations threatening, to

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<sup>6</sup> Both of these papers refer to the same study.

<sup>7</sup> No reliability statistics were reported for the measures of racism and authoritarian aggression.

social expressions of authoritarianism, ethnocentrism and dogmatism. Ironically, Sidanius' research may have provided sufficient data to reject such a conclusion. The reasoning linking authoritarianism and ethnocentrism to intolerance of ambiguity rests on the assumption that intolerance of ambiguity is a generalized personality trait which extends from personal to social manifestations. Sidanius has convincingly demonstrated that intolerance of ambiguity, as measured by the Budner scale, is not generalized even over different personal domains. Rather than being held together by personality, the "need for the familiar" and the "need for certainty" must be considered independently (and have different correlates). In the light of the specificity of different aspects of intolerance of ambiguity, what may account for the significant correlations between the Budner scale and measures of authoritarianism, prejudice, and dogmatism; what could explain the apparent generality of the trait from the personal to social domains?

Ray suggests that "to at least some extent the [Budner] scale measures conservatism or caution as much as anything else" (1984c, p. 284; see also Ray, 1988; Tetlock, 1993). In other words, the observed associations between the Budner scale and measures of authoritarianism and ethnocentrism may not have anything to do with personality, but may be tautologous, accruing due to commonalities in conservative scale content. This objection was not addressed by the replies of either Sidanius (1988a) or Ward (1988).<sup>8</sup> Ideological content bias is, however, a legitimate critique given that the items of the Budner scale refer to laws, rules, and political values (e.g., "The sooner we all acquire similar values and ideals the better"). Since no personality theory has been advanced which can explain the complexities of Sidanius' findings, this must be considered the most parsimonious explanation of the association between the Budner scale and measures of authoritarianism and intolerance of ambiguity. Different factors of the Budner scale correlate with different measures of ideological attitudes because there are content commonalities between these measures.

The scaling and experimental procedures which have been used to measure intolerance of ambiguity face opposite difficulties. Where the experimental procedures are devoid of content, the scales include content which tends to be confounded with the criterion measures with which they are correlated. Thus, the experimental procedures seem to assess behaviour which is task specific, whereas the scales assess responses which are ideologically specific. Consequently, the latter correlate with measures of authoritarianism and ethnocentrism while the former do not. Both procedures are, however, unified in their reliance on the assumption that intolerance of

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<sup>8</sup> Perhaps this omission occurred because of the need to address other serious errors in Ray's (1988) critique.

ambiguity is a generalized and pervasive personality trait. Where Frenkel-Brunswik defined intolerance of ambiguity as a social and evaluative construct, these measures assess it in an asocial and non-evaluative manner, relevant to diverse aspects of individual functioning. A few researchers have rejected this assumption, and have limited their definition of intolerance of ambiguity to the original evaluative features of the construct.

## **Evaluative categorization**

On the basis of her descriptive research, Frenkel-Brunswik defined intolerance of ambiguity as the inability to recognise the coexistence of positive and negative features in the same object. These "objects" included authorities, social groups, and values. As such, intolerance of ambiguity entailed the categorization (e.g., ingroup-outgroup), and unambivalent evaluation (good versus bad) of social "objects". Three studies have considered evaluative categorization central to the definition of intolerance of ambiguity. These studies have been concerned with possible ambivalence in categorization — that is, the attribution of both positive and negative traits to a single category. As such, these studies operationalize intolerance of ambiguity in a manner consistent with Frenkel-Brunswik's description of the construct at an operative level. Although they examine the generality of intolerance of ambiguity, this is conceptualized as a much narrower trait than that outlined by Bochner, Budner, and others.

Steiner (1954) defined intolerance of ambiguity as the extent to which an individual perceiver assumes that traits of similar evaluative connotations will co-occur. Two concepts underlie this definition. "Trait contingency" refers to the probability with which a perceiver expects the co-occurrence of two traits. "Trait discrepancy" refers to the distance separating two traits along an evaluative dimension. Steiner hypothesized that greater trait discrepancy will be associated with lower trait contingency among all individuals. The less similar two traits are (eg., passionate & quick-tempered versus lazy & quick-tempered), the less likely they will be expected to co-occur in a single individual. Additionally, Steiner hypothesized that this relationship will be stronger among high-scoring ethnocentrics than among low-scorers. In preliminary research, 30 students rated the desirability of 32 traits on a ten-point scale. Eighteen test items were derived from the mean ratings. Each test item consisted of two couplets, one with approximately equal ratings (AB) and one with unequal ratings (AC). Fifty two students then participated in a study where they responded to the test items by crossing out the pair of traits which seemed less likely to occur together. Intolerance of ambiguity was scored by the number of times the AC (discrepant) pair had been crossed out. Each subject also completed the California E scale, and was assigned



to a high-scoring or a low-scoring group if they fell in the quartiles of the distribution of E scores. As hypothesized, the high-scorers ( $M = 8.69$ ) crossed out significantly more AC pairs than the low-scorers ( $M = 6.85$ ) ( $t = 5.15$ ,  $p < .03$ ).

Kenny & Ginsberg (1958) correlated Steiner's measure of intolerance of ambiguity with a measure of authoritarian submission among their heterogeneous volunteer sample of 76 adults. The correlation between the two measures was not significant ( $r = -.07$ ). Steiner & Johnson (1963) argued that this correlation was attenuated by the sample heterogeneity, and they once again replicated their study with a homogeneous sample of 75 adults. They found intolerance of ambiguity to be significantly correlated with the California F scale ( $r = .26$ ,  $p < .01$ ). Steiner & Johnson (1963) went on to argue that, given intolerance of trait inconsistency, authoritarian rigidity was explicable in terms of their subjects' difficulty in accepting new information which conflicted with previous impressions.

Steiner's studies are the only ones which have examined whether the fundamental evaluative aspect of intolerance of ambiguity is generalized beyond its expression in ethnocentrism and authoritarianism. While his findings suggest that it is, this conclusion must be treated as tentative because his results are open to alternative interpretations. They may, for example, have been influenced by the experimental "demand" to appear rational and consistent in a scientific context (Orne, 1962). This explanation gains credence if one accepts that authoritarian conformity and submission would engender more rational and consistent responses among authoritarians. The potential for this demand to influence results is increased by requiring subjects to evaluate the hypothetical possibility of trait co-occurrence, rather than the co-occurrence of traits in people that the subjects are familiar with.

Nonetheless, Steiner's work does overcome some of the most basic difficulties associated with the experimental and psychometric measures. His measure of intolerance of ambiguity approaches Frenkel-Brunswik's empirically derived definition (not her hypothesized theoretical definition) as it includes the evaluation of social "objects". Consequently, the "task at hand" which reflects intolerance of trait inconsistency parallels the unambivalent rejection of outgroups characteristic of ethnocentrism. As such, Steiner does not need to infer intolerance of ambiguity from performance at an unrelated task such as the Rorschach test. If his measure is task specific, it is specific to the appropriate task. Moreover, unlike the content of the scales measuring intolerance of ambiguity, Steiner's measure is not ideologically loaded as he assesses performance rather than beliefs. Any associations arising between this performance and ethnocentric beliefs will thus not be confounded by scale artifact.

The review of studies which have attempted to assess whether a general trait of intolerance of ambiguity can be traced from its social expression in ethnocentrism to other manifestations has proved suggestive. Methodological difficulties have, however, made an unequivocal interpretation of findings impossible. The profound inconsistency and lack of significant associations between ethnocentrism and measures of intolerance of ambiguity which gauge reactions to ambiguous stimuli implies that intolerance of ambiguity cannot be tracked down to non-evaluative performance at specific asocial tasks. The weak and potentially artefactual relations between ethnocentrism and scales of intolerance of ambiguity also cannot confirm the hypothesized relationship between social expressions of intolerance of ambiguity and a basic personality disposition which finds ambiguity threatening. Finally, although Steiner's studies suggest that ethnocentrism may be associated with assumptions of trait consistency, they are open to alternate interpretation.

Now that the conceptual and operational status of the different measures of intolerance of ambiguity have been distinguished, we may further explore the generality of intolerance of ambiguity by investigating the interrelationships between these different measures. If someone, for example, expresses an unambivalent evaluation of individuals, will this also be reflected in rigidity and/or cognitive simplicity. These studies may clarify the generality of intolerance of ambiguity from one aspect of individual functioning to another. Accordingly, the review will broaden its scope to include constructs of cognitive style derived from the cognitive-centred, social learning orientation.

### **Associations between measures of intolerance of ambiguity**

Earlier it was argued that, despite their differences, there are numerous descriptive, logical, theoretical, and evaluative similarities between different constructs of cognitive style. Cognitive complexity, for instance, is defined in terms of differentiation, the variety of aspects of an issue that a person recognises, and integration, the conceptual connections between the differentiated characteristics (MacNeil, 1974; Schroder *et al.*, 1967; Tetlock, 1983a). While the construct of cognitive complexity has been developed and used mainly by cognitive-centred researchers, it possesses a number of phenotypical commonalities with the psychodynamic constructs of rigidity and intolerance of ambiguity. By relying on rigidly defined, simple evaluative rules, the authoritarian is also expected to display low levels of differentiation and integration.

Our concern here is whether or not the diverse measures of cognitive style are empirically

related. The discussion is necessarily a broad sweep since all the different measures cannot be considered in much detail.<sup>9</sup> The review will commence with a comparison of evaluative and non-evaluative measures of intolerance of ambiguity, and will gradually broaden its scope to incorporate the relations between intolerance of ambiguity and rigidity, and cognitive complexity.

In an effort to establish the generality of cognitive style, Kenny & Ginsberg (1958) correlated 13 different measures among their heterogeneous sample ( $N = 76$ ). They included Steiner's measure of intolerance of trait inconsistency along with other measures of intolerance of ambiguity and cognitive functioning. Intolerance of trait inconsistency was unrelated to all other measures of cognitive style, including the Walk scale and three different indices of performance at the autokinetic illusion. Moreover, Kenny and Ginsberg (1958) found that only four of the 66 correlations were significant ( $\alpha = .01$ ) and concluded that their results "offer little support for a general construct of intolerance of ambiguity" (p. 304). Although these results may have been attenuated by the sample heterogeneity, Vannoy's (1965) finding that intolerance of trait inconsistency was orthogonal to the Budner scale ( $r = 0$ ) among a homogeneous sample of 113 male psychology students, support this conclusion.

It has already been reported that the Rorschach test and the Azzageddi test do not correlate with each other. Studies which have found significant associations between different measures of intolerance of ambiguity have typically employed either (a) experimental procedures involving similar tasks which have contents purged of social meaning, or (b) scales with similar contents. In addition to the rock sorting task described above, Bochner (1965), asked subjects ( $N = 67$ ) to sort 68 photographs of people into as many categories as they thought necessary. The photographs consisted of a variety of unknown people. Bochner found that the number of categories employed in the rock sorting task correlated significantly with the number of categories employed on the picture sorting task ( $r = .62$ ). In their study of the generality of categorizing behaviour, Sloane, Gorlow, & Jackson (1963) asked subjects ( $N = 60$ ) to sort six different sets of objects into categories. The objects included pictures of unknown people, other pictures, drawings, and descriptions of fictitious people. All six sorting tasks were significantly intercorrelated and all loaded heavily on a single principal component. Both Bochner (1965) and Sloane *et al.* (1963) interpreted their findings as suggesting that categorization behaviour indicative of intolerance of ambiguity is generalized across content domain. One wonders, however, whether different meaningless contents may be sufficient to establish generality. A

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<sup>9</sup> See Streufert & Streufert (1978) for a complete review of the constructs and operational definitions of cognitive style.

response set could have produced the significant intercorrelations. What, for example, would have occurred if subjects were asked to categorize a list of "communist dictators" and a list of "American presidents" both during and after the Cold War?

Although Adorno *et al.* (1950) used the terms rigidity and intolerance of ambiguity interchangeably, subsequent research has distinguished between them. However, just like the measures of intolerance of ambiguity, measures of rigidity have generally not been associated with each other (Appelzweig, 1954; Forster, Vinacke & Digman, 1955; Goodstein, 1953; Levitt, 1956). Since performance at rigidity and intolerance of ambiguity tasks have typically been "task specific", it is doubtful whether consistent significant correlations can be generated between measures of rigidity and intolerance of ambiguity. In addition to Kenny & Ginsberg's (1958) negative results, Coulter (in Eysenck, 1954) found that the cat-to-dog test and a scale measuring intolerance of ambiguity were uncorrelated with three different measures of rigidity. On the other hand, MacDonald (1970) found the Rydell-Rosen scale to correlate significantly with the Gough-Sanford measure of rigidity ( $r = .41, p < .01, N = 787$ ), and Eckhardt & Newcomb (1969) found that Coulter's measures of rigidity and intolerance of ambiguity were significantly related ( $r = .67, p < .01, N = 46$ ). Although more research is needed to draw firm conclusions, the empirical evidence does not provide strong support for an association between operationally distinct measures of rigidity and intolerance of ambiguity.

Finally, a number of studies have attempted to establish associations between intolerance of ambiguity and the more formal constructs of cognitive style derived from the cognitive-centred approach. Once again, these measures of cognitive functioning have not been consistently associated with each other. While some studies have uncovered significant correlations between the different measures (Allard & Carlson, 1963; Barron, 1953; Bieri & Blacker, 1956; Koenig & King, 1962; Russell & Sandilands, 1973), generally speaking, they have either not correlated with each other (Hageseth, 1983; Sechrest & Jackson, 1961; Suedfeld, Tomkins & Tucker, 1969; Vannoy, 1965; Wyer, 1964), or have correlated weakly (Sidanius, 1976, 1978b, 1985; Sidanius & Ekehammar, 1976). Even more concerning is the fact that different indices of the same aspect of cognitive functioning have not been associated. Sidanius (1978b, 1985), for example, found non-significant correlations between each of two different measures of cognitive complexity and three different measures of cognitive flexibility (see Appendix A).

O'Connor (1952) correlated the Walk Scale with indices of abstract reasoning ability (i.e., the ability to solve a number of "familiar", "symbolic", and "tricky" syllogisms). She found that intolerance of ambiguity was unrelated to the ability to reason abstractly; correlations varied from

-.12 for the tricky material to .04 for the symbolic material ( $N = 57$ ). Similarly, Vannoy (1965) found that Budner scores were orthogonal to 15 different measures of cognitive complexity ( $N = 113$ ). Tom, Cooper & McGraw (1984) also found the Budner scale to be unrelated to the paragraph completion test of cognitive complexity ( $r = .08$ ,  $N = 25$ ). The Budner scale has, however, been shown to correlate with syllogism performance for a group of student atheists ( $r = -.72$ ,  $p < .01$ ,  $N = 10$ ), but not for a group of religious students ( $r = .25$ ,  $N = 27$ ) (Feather, 1967). Raphael, Moss & Cross (1978) also report that the Budner scale correlated significantly with a measure of cognitive complexity ( $r = -.37$ ,  $p < .001$ ,  $N = 97$ ). Sidanius (1985) correlated the Budner scale plus its seven factors with six different measures of cognitive functioning ( $N = 195$  high school students). Only eight of the 48 correlations were significant ( $\alpha = .05$ ). Interestingly, all significant correlations were with either the total Budner score or with Factor 1. Less interesting were the results of his earlier study. Sidanius (1978a) correlated six measures of cognitive functioning with the total Budner scale plus its six factors ( $N = 46$  university students). Although seven of the 42 correlations were significant ( $\alpha = .05$ ), there was no consistent pattern of intercorrelations. Echoing the conclusions of Kenny & Ginsberg (1958), Vannoy (1965), and Sloane *et al.* (1963), Sidanius (1978a) observes that:

...a singular, unitary trait of cognitive functioning underlying cognitive behaviour is quite difficult to establish, even within the same content domain (p. 528).

While this does appear to be the majority opinion, what may account for the significant associations between intolerance of ambiguity and cognitive functioning? Unlike the spurious relationships that arise between measures of intolerance of ambiguity which employ similar tasks, or scales with similar contents, correlations between intolerance of ambiguity and the cognitive-centred indices of cognitive functioning typically employ substantially different measurement procedures. The interpretation of these findings is complicated by the fact that there are no consistent differences between the studies which have found intolerance of ambiguity to correlate significantly with cognitive functioning and studies which have not. Often similar measures and procedures have been employed by both groups. One possibility is that intelligence may underlie the significant associations. Intelligence has been shown to correlate with measures of intolerance of ambiguity (Davids, 1955; Davids & Eriksen, 1957), including the Budner scale (Raphael *et al.*, 1978), with rigidity (Levitt, 1956), and with cognitive complexity (Schroder *et al.*, 1967; Scott *et al.*, 1979). Moreover, two of the studies which have found significant associations between intolerance of ambiguity and cognitive functioning (Raphael *et al.*, 1978; Sidanius, 1985) have employed heterogeneous samples where the covariate of intelligence may have impacted on the results. Consequently, it could be argued that intolerance of ambiguity is independent of rigidity and cognitive complexity, and that some spurious relationships have accrued by not controlling for variance in intelligence.

The opposite position is taken by Scott *et al.* (1979). They argue that higher intercorrelations would have been uncovered if researchers had used more reliable measures which were not based on the assumed generality of cognitive style, and which were sensitive to individual variance across content domain.<sup>10</sup> Scott (1963, 1966, 1969; Scott *et al.*, 1979) has meticulously developed a multidimensional model of "cognitive structure" and has deduced a number of reliable measures of different aspects of the model. Instead of offering global predictions of the generality of cognitive style, Scott makes theoretically-grounded predictions regarding the intercorrelations among different facets of cognitive structure.

Among these different facets, Scott (1966, 1969, Scott *et al.*, 1979) has identified "object ambivalence", a construct which incorporates both the evaluative and social characteristics of Frenkel-Brunswik's definition of intolerance of ambiguity. Object ambivalence is assessed by requesting subjects to select any number of adjectives (from a list with equal numbers of positive and negative adjectives) which describe certain objects (e.g., nations). In contrast to Frenkel-Brunswik's hypothesis of generality, Scott *et al.* (1979, p. 163) found object ambivalence to be associated with only certain other components of cognitive structure (i.e., object complexity and dimensionality, affective-evaluative consistency, affective balance, and object evaluation and liking), but not with a variety of other structural properties. According to Scott (1969), these relationships occur because they are "tautologous". In other words, there are functional and structural relationships between certain structural dimensions of cognition, but not between others (Scott, 1969; Scott *et al.*, 1979). Therefore, although object ambivalence is not generalized across all aspects of cognition, it does appear to be closely related to other aspects of cognitive structure.

In addition to distinguishing between different aspects of cognitive structure, Scott questions the assumption of generality by emphasizing individual variability in cognitive style across content domain. Scott *et al.* (1979) report that object ambivalence has one of the lowest cross-content stabilities. They compared shared within-domain variance over three measures of ambivalence with between-domain variance (over four content domains) for an American ( $N = 88$ ) and a Japanese ( $N = 80$ ) student sample. For both the United States and Japanese samples, shared variance within domains ( $r^2 = .315$  and  $r^2 = .175$  respectively) was larger than between-domain shared variance ( $r^2 = .083$  and  $r^2 = .058$ ).

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<sup>10</sup> Scott has computed the reliability coefficients from the average intercorrelations of the studies examining the generality of equivalence range (Sloane *et al.*, 1963), cognitive complexity (Vannoy, 1965), and intolerance of ambiguity (Kenny & Ginsberg, 1958). Despite the task similarity of many of the measures, the composite reliabilities were .53, negative, and .23 respectively.

It is appropriate to leave Scott, temporarily, with the final say regarding the generality of intolerance of ambiguity. Although he does not employ the term tolerance of ambiguity, his structural construct of object ambivalence approaches the descriptive definition offered by Frenkel-Brunswik; it involves ambivalent categorization and evaluation of social contents. Contrary to Frenkel-Brunswik's early theorizing, intolerance of ambiguity does not appear to be a generalized personality trait. Ambiguity tolerance varies over content domain, and cognitive "traits" do not pervade all aspects of cognitive structure. The present work follows Scott *et al.* (1979) in rejecting the assumption of generality which underlies the theory, and has been incorporated into the measures of cognitive style. According to Scott *et al.* (1979), the literature has assumed that:

...a person has a characteristic mode of organizing or utilizing information that pervades all mental activity... The adoption of such monolithic concepts is congruent with major historical trends within psychology, resulting in substantial methodological simplification... The use of projective tests such as the Rorschach and the TAT to assess personality characteristics presumes that people cognize ambiguous pictures and ink blots in a manner equivalent to that employed for interpersonal relations (pp. 141-142).

Scott, however, lacks a coherent theory of individual variability in cognitive style. His social learning theory has no way of explaining the relationship between cognitive style and content which does not reduce to differential experience. An individual is presumed to have a characteristic cognitive style within certain contexts and over certain contents, depending on his or her history of "experience" within those contexts and content domains.<sup>11</sup> Thus, although Scott can accommodate intra-individual variability, this is grounded in a theory of individual difference and relies on a universalistic ontology of the mind-in-general (albeit a more complex one).

While such theorizing may explain variability across content and context, it encounters fundamental problems in explaining the general trend — as evident in Steiner's studies as well as those of Tetlock, Sidanius, Rokeach etc. — for ideological contents to be associated with cognitive style in a non-random manner. If individual cognitive style varies over content domain as a function of "experience" within that domain, why should certain contents be consistently associated with particular cognitive styles; because individuals supporting those contents are more

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<sup>11</sup> Altemeyer's (1981, 1988a) influential learning theory account of authoritarianism also bases 'character' change on experience. He argues for a broad education, especially in the humanities, to change authoritarian character by expanding their base of experience. While these individualistic conclusions are supported with correlational evidence, on a wider social level they have been falsified in the most dramatic way. The so-called educated, civilized, and cultured nations of Europe demonstrated their "barbarity" during the Great war, where in addition to its "warlike and barbarous...relations with non-European peoples...these destructive characteristics were turned toward other European countries who were supposed to be similar bearers of 'civilization'" (Angus, 1994, p. 83).

or less experienced in them? What is required is a theory of individual variability over content and context that can also explain why certain contents are linked to certain cognitive styles within particular contexts. Such a theory would have to reject the individual as the locus of explanation. An individualistic theory may explain either individual stability or variability, but has difficulties in reconciling individual variability with the finding that the cognitive style of collectives of individuals is related to cognitive contents in a non-random manner. If one proposes to explain individual variability in terms of differential experience over content domain, to account for a non-random relationship between cognitive style and content, a socially-based theory is needed to explain why certain ideological orientations are less/differentially experienced than others. This is necessary because one can no longer rely on personality-based explanations, for example, in terms of psychodynamic defences.

## **Theorizing individual variability in cognitive style**

A number of theories have been advanced to explain individual variability in cognitive style. The most comprehensive accounts have used psychological states and processes as mediating influences to explain individual variability. These theories have been developed in association with the body of literature which sought to establish the generality of cognitive style, and were typically generated to explain anomalous empirical findings. More recently, a small body of literature has advanced explanations of individual variability in terms of social processes and dynamics.

This section aims to review these theories and evaluate them in terms of their universal aspirations. Thus far it has been argued that, in the manner of the "methodological circle", an individualist and empiricist account of cognitive style has been sustained by ontological assumptions which have become embodied in measurement instruments. Here the order of explanation is reversed. It is argued that, despite recognising variability in cognitive style, theorists have continued to endorse an empiricist ontology by accommodating observed variability in interactionist models of personality. Finally, Billig's account of a rhetorical psychology is introduced and employed to sketch an anti-universalistic conception of cognitive style.



## Personal dynamics

Extensions of the basic principles of psychodynamics and learning theory have been employed to explain intra-individual variability in cognitive style in terms of the dynamics and processes of individual psychology. These explanations have not been as concerned with the influence of content as they have with context, but their fundamental premises can be applied to both forms of variability.

Psychodynamic theories explain variability in cognitive style by means of two separate, but related, dynamics: ego-threat and commitment. Ego-threat is the basic psychodynamic construct which underlies the authoritarian syndrome, and which was used to explain the necessary relationship between cognitive style and content (Adorno *et al.*, 1950; Forbes, 1985; Frenkel-Brunswik, 1948b).<sup>12</sup> By drawing on the Freudian notion that psychodynamic defences are elicited only in the presence of specific threatening contents,<sup>13</sup> Brown (1953) argued that variability in authoritarian traits would be manifest, and that the relationship between ethnocentrism and cognitive style would only be found under ego-threatening conditions (see also Christie, 1993; Neuringer 1964; Pally, 1955). Sidanius (1988a; Sidanius & Lau, 1989) has recently offered a similar line of argument by suggesting that individual cognitive style will vary across content domain according to the psychological functions served by beliefs in that domain. Cognitive style is thus theorized to vary across context and content domain as a function of the ego-threat associated with that domain for a particular individual. Non-threatening contents (e.g., countries of the world) will be associated with different cognitive styles than threatening contents (e.g., personal health), depending on context (e.g., if one is sick or well). White, Alter & Rardin (1965; also Rokeach, 1951b), for instance, demonstrated that subjects who scored high on both the dogmatism scale and the F scale differed in their usage of conceptual categories on high syndrome relevant stimuli (social acts), but not on low syndrome relevant stimuli (occupational names).

The concept of commitment is closely related to that of ego-threat. Rokeach (1956a, 1960) argued that ego-weakness would be associated with the desire to submit to, and commit oneself to an absolute authority. By locating the fount of this commitment in personality dynamics, Rokeach theorized a general tendency toward commitment across different contents. However, the causal primacy of ego-threat and commitment is reversed by experiential theories of cognitive style,

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<sup>12</sup> See pp. 28-29 of this thesis for a discussion of the psychodynamic account of the relationship between cognitive style and content.

<sup>13</sup> See p. 62 of this chapter.

such as that offered by Sidanius.<sup>14</sup> These theories can accommodate individual variability over different contents by arguing that experience in a particular domain engenders commitment to that domain, resulting in particular cognitive styles (rigidity, intolerance of ambiguity) when the domain (and ego involvement) is threatened. One reason why the cognitive style of political elites differs from that of their followers, may be that, having devoted their lives to political matters, they are more committed to their beliefs (as would be predicted by dissonance theory). In addition to being more knowledgeable and sophisticated (Converse, 1964), elites may thus also be more dogmatic in defending their beliefs (cf. DiRenzo, 1967).

Social learning theorists have suggested that individual variability in cognitive style is attributable to either different levels of experience an individual has had, or stress that an individual encounters in a particular situation or content domain. Stress and experience are argued to influence the structure of personal constructs (Kelly, 1955) or field space (Lewin, 1936), and thereby lead to differences in information processing (Crockett, 1965; Schroder *et al.*, 1967; Scott *et al.*, 1979). Extended experience within certain content domains is argued to increase the complexity (differentiation & integration) of the individual's personal constructs or field space. Crockett (1965), for example, has advanced the "frequency of interaction" and the "significance of domain" hypotheses to explain cross-content variability in cognitive style. In support of these hypotheses, Supnick (1964) demonstrated that descriptions of liked individuals were more complex than descriptions of disliked individuals, and that more constructs were used to describe peers than older people.

The second explanation of individual variability advanced by social learning theorists is that environmental conditions of threat, interest, and complexity influence information processing by arousing individual stress. Schroder *et al.* (1967) have observed that cognitive complexity decreases under conditions of very low and very high levels of environmental stressors (see also Streufert & Driver, 1966; Streufert & Schroder, 1965; Streufert & Streufert, 1978; Suedfeld, 1964; Suedfeld & Tetlock, 1977; Suedfeld, Tetlock & Rameriez, 1977). While this theory has typically been applied to situational differences in stress, it is equally applicable to content induced stress. Scott *et al.* (1979), for example, demonstrated that more complex cognitive contents are associated with higher levels of "object ambivalence".

There is much overlap between the constructs which have been advanced by psychodynamic theory and social learning theory to explain variability in cognitive style: between experience and

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<sup>14</sup> Sidanius' experiential account of cognitive style is discussed on pp. 42-43 & 45 of this thesis.

commitment, and between ego-threat and stress. A situation or content domain in which an individual has little experience will often also be one to which the individual is relatively uncommitted. In addition, novel situations and contents may be stress invoking, and these may also be ego-threatening if the individual is expected to perform well in these situations. Panic is an example of extreme cognitive rigidity and inflexibility which occurs under ego-threatening and stressful situations in which the individual has little experience and is highly committed to a certain outcome (e.g., escaping the flames). Further investigation must be undertaken to disentangle the multiplicity of personal dynamics which influence cognitive style.

There is, however, one important difference between psychodynamic and social learning theories. If one assumes, *ceteris paribus*, that "experience" across different contents will be randomly distributed for a collective of people, then theories of individual variability which are based on learning and experience cannot account for a non-random association between cognitive style and ideological beliefs. Under this assumption, individuals who have experience in politics should display more complex styles than the inexperienced, but no differences are to be expected between liberals and conservatives. Any relationship between cognitive style and ideological beliefs would imply that one group is more experienced in their ideology than the other. In contrast, psychodynamic accounts, which rely on the construct of ego-threat, may theorize both individual variability across differentially threatening contents, and a necessary relationship between the style and content of cognition. They can propose a relationship between cognitive style and ideological beliefs because they advance a personality-based predisposition for particular contents. While the cognitive style of high-scoring authoritarians may vary as a function of threat, when threatened in a political field, they are theorized to display both conservative beliefs and cognitive rigidity and intolerance of ambiguity. Thus, psychodynamic theories of personality can account for both individual variability in cognitive style and a relationship between the style and content of beliefs over a collective. In contrast, learning theories of individual variability need to include an account of why individuals of certain ideological orientations are less experienced, in order to accommodate observed relationships between the cognitive style and ideological beliefs.

## Social dynamics

Individualistic accounts of variability in cognitive style are attached to well established psychological theories. Although the idea that social processes influence cognitive style may be traced back to Le Bon's (1896) crowd theory, social accounts of individual variability have only

recently gained the attention of researchers. The literature consists of a few studies which have pointed to one or two social dynamics which influence cognitive style. In addition to the lack of systematic theory, cognitive complexity is the only construct which has been investigated.

The study of variability in cognitive style over different, naturally occurring social contexts and across different contents has been aided by the development of the integrative complexity coding scheme.<sup>15</sup> Archival research which has used this coding scheme has shown that social aspects of a situation, such as role demands (Suedfeld & Rank, 1976) and group pressure (Tetlock, 1979), may be important determinants of cognitive complexity. These results have been interpreted in terms of underlying social processes — i.e., practical demands of administrative responsibilities (Suedfeld & Rank, 1976) and the groupthink phenomenon (Tetlock, 1979) — which impact on individual cognition. Their "between-subjects", quasi-experimental designs are, however, open to alternate, more individualistic interpretations.

A few studies have examined intra-individual changes in cognitive style across situation by employing "within-subjects" designs. These have demonstrated individual variability which is inexplicable by individualistic theory. Porter & Suedfeld (1981) traced the cognitive complexity of the personal correspondence of five eminent British novelists over their lifetimes, in an effort to explore possible individual and social determinants of cognitive complexity. They found that complexity increased with age, but decreased markedly during the last five years of life, and with illness. Complexity was also negatively related to war, but positively related to civil unrest. These latter results proved contrary to the hypothesis that social conditions influence cognitive complexity by arousing stress, because both war and civil unrest are stressful. Porter & Suedfeld (1981) suggested that "information flow" in the environment was the determining factor; whereas wars were associated with decreased information flow, civil unrest generated increased information flow. Rather than theorizing cognitive complexity as a consequence of the mediating influence of individual psychological functioning, it was interpreted in terms of the prevailing social conditions (see also Weigert, 1991).

Tetlock (1981) tested the hypothesis that the cognitive complexity of presidential rhetoric would increase gradually after election into office. This hypothesis was derived from a social learning account of cognitive complexity, which predicts gradual cognitive adjustment in response to experience with new practical demands. In contrast, Tetlock found that the complexity of

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<sup>15</sup> The integrative complexity coding scheme (Suedfeld & Rank, 1976; Tetlock & Hannum, 1983) was developed by extending the method of coding cognitive complexity in the paragraph completion test (Schroder *et al.*, 1967).

American presidential rhetoric increased suddenly after their assuming office (see also Tetlock, Bernzweig & Gallant, 1985; Tetlock & Boettger, 1989; Tetlock, Hannum & Micheletti, 1984). He used impression management theory to account for these findings. Minority leaders, he argued, must employ clear-cut rhetoric to convince mass publics to "throw the rascals out" by impressing others with their political determination and will (Tetlock, 1981). Once these leaders have gained power, however, they must employ more complex arguments to be seen as "acting responsibly".<sup>16</sup> Such reasoning would find support in Moscovici's (1976, 1985b) theory of minority influence. Moscovici argues minority influence is fostered by a behavioral style of "consistency", which "projects an internal state of mind...into the environment" (1985b, p. 28).

Tetlock and colleagues (Tetlock, 1983b; Tetlock, Boettger & Skitka, 1989; Tetlock & Kim, 1987) have also used the integrative complexity coding scheme in experimental situations to examine the effect of accountability on cognitive complexity. In sum, integrative complexity was found to increase under conditions where individuals anticipated accounting for their beliefs to an unknown audience. Subjects appeared to engage in preemptive self-criticism, anticipating potential criticism which a later audience might raise.

Unfortunately, there has been comparatively very little interest in the social determinants of cognitive style, and no powerful explanatory, and well researched theories have been developed. However, one can distinguish between two types of social influences: first, environmental conditions such as information flow in society at large; and second, social processes, including impression management, accountability, and groupthink. While the former open up completely new avenues of research, the latter still focus on the individual psychological processes and dynamics responsible for variability. Nonetheless, these studies are important for the present work since they suggest that variability in cognitive style may be related to the different rhetorical functions demanded of an individual in different roles and situations.

Although Tetlock's research constitutes a major advance over personality models of cognitive style, he has not broken with the assumption of self-contained individualism. His explanation of variability is restricted to external factors which impact on the universal psychological processes of dissonance theory, and he continues to endorse personality theory. He assumes that individuals

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<sup>16</sup> If this argument is correct, and "acting responsibly" is also associated with a political moderatism, impression management could explain the results which support extremism theory. Impression management theory could, therefore, account for a non-random relation between cognitive style and content in addition to explaining individual variability.

are cognitive misers, who "can be motivated to think in integratively complex ways" (Tetlock, 1993, p. 402), but who nonetheless have "thresholds for the activation of coping responses" - i.e., traits (*ibid*, p. 403).

## Critique

The discussion has highlighted a number of personal and social determinants of cognitive style which have been identified in the literature. The studies reported here all demonstrate that individuals display different cognitive styles over different contexts and content domains. As such, they contradict Mischel's (1973, 1979) claim that cognitive style tends to be "most consistent". Also, they suggest that the common practice of measuring an individual's cognitive style by means of a scale or experimental procedure — which assign an individual a single score to represent his/her characteristic cognitive style — may produce highly misleading results.

These findings, however, have not had a noticeable impact on the authoritarianism literature, and even Tetlock, the ardent advocate of individual variability, has continued to study cognitive complexity as a personality trait (Tetlock *et al.*, 1993). Thus, individual variability in cognitive style remains equivocal:

Today we know that integrative complexity possesses some attributes of a relatively stable individual difference variable (moderate consistency across time, situation, and issues) and some attributes of a relatively context-specific variable (predictable variation as a function of situational and issue variables) (Tetlock, 1993, pp. 384-385).

There are a number of reasons for this equivocation. Firstly, in comparison with the large body of research associated with the authoritarianism literature, which has assumed cognitive style to be a generalized personality trait, the studies which have demonstrated individual variability remain few and obscure. Secondly, some research has provided evidence for the possibility that cognitive traits are partially generalized over different, circumscribed content domains and aspects of cognitive structure (Steiner, 1954; Steiner & Johnson, 1963; Scott *et al.*, 1979).

Most importantly, all evidence of individual variability has been accommodated into individualistic theory, under "interactionist models" of personality (Argyle, 1976; Ekehammar, 1974; Mischel, 1968). Tetlock (1993), for instance, concludes that "Lewin's classic formula, Behaviour = f(Person, Environment), summarizes a good deal of what we have learned about determinants of integrative complexity during the past twenty years" (p. 384). Interactionism, however, has tended to reinforce, rather than undermine the personality status of cognitive style,

for these models *presuppose* consistent individual differences which are then influenced by situation. By "separating" variance attributable to individuals and situations in ANOVA-type designs, "most empirical work [on interactionism] has been limited to the mechanistic interactions of two independent variables, i.e., a personal characteristic and a situational manipulation, on individual behaviour as the dependent variable" (Krahé, 1990. p. 67). As Sampson (1981) has observed, interactionism:

...has not advanced beyond the value biases contained within a purely cognitivist perspective itself: (1) A subjectivist reduction still remains primary in most interactionist views; the subject is the active element, the object a more passive and unchanging thing 'out there'. (2) Inquiry is rarely if ever addressed to the manner by which objects or situations are themselves constituted or cast (pp. 733-734).

Interactionist models maintain a dualism between the individual, and social or situational influences of cognitive style, but favour the individual's psychological processes as the active elements in this relationship.

This self-contained individualism and regress to a trait-like conception of cognitive style is clearly evident in the accounts of individual variability offered by the learning theorists and by Tetlock. Learning theorists such as Schroder *et al.* (1967) argue that an individual's cognitive structure is a pre-formed psychological property which functions differentially depending on the individual's experience with, or the complexity of, the external situation. The individual remains as a separate and distinct unit of analysis and object of knowledge. The laws, principles, and properties of this object may thus be legitimately studied independently of context. Tetlock, for example, proposes that the universal psychological process of congruity is the "active element" which, in combination with ideological orientation, (somehow) produces characteristic cognitive styles. However, when individuals find themselves in situations where they need to manage their impression or account for their beliefs, they may employ different styles of cognition. Accordingly, Tetlock reinforces a dualism between the individual and situation, views the individual as the active processor of a passive external world, and is thus able to consider the trait-like and situation-specific properties of cognitive style independently (in different papers: compare Tetlock, 1986 with Tetlock *et al.*, 1993).

It is precisely these dualism, the divides between the individual, the situation, and the cognitive content, which underlies the objectivism of an empiricist epistemology (Barwise, 1988; Gergen, 1985). The core theoretical difference between an empiricist and anti-universalist psychology, therefore, lies in the distinction between what is inside and outside the individual. Whereas empiricism reinforces this distinction by defining (internal) meaning/representation in terms of external truth conditions, an anti-universalistic psychology collapses the distinction by socializing

and contextualizing individuality and consciousness. The discipline of psychology has been forced to accommodate the inherently contextual and content-bound nature of psychological phenomenon (Gergen & Semin, 1990; Markovà & Foppa, 1990). This has a number of implications for the conceptualization and measurement of cognitive style.

These implications can be illustrated by comparing Tetlock's understanding of cognitive style with the anti-universalistic conception derived from Billig's rhetorical psychology. To a certain degree, these are "incommensurable paradigms", and at this stage the discussion will be restricted to some of the major implications that a shift to a rhetorical psychology has for the conceptualization of cognitive style. The deeper theoretical differences between the two paradigms, and a more detailed account of rhetorical psychology will be developed in Chapter 6.

Billig adopts a completely new object of study when he "shifts the focus of social psychology itself away from the uncovering of mental structures within the individual...toward social factors, especially those relating to language" (1991, p. 14). By focusing on language, Billig is able to overcome the dualism and cognitive bias denounced by Sampson (also Gergen, 1985; Henriques *et al.*, 1984). He neither assumes that cognitive style is a property of individual psychology, nor aims to identify and decode the laws of cognition as the empiricist tradition has recommended. Instead of splitting subject and object — viewing individual psychology as the pre-formed "active element" and contents and contexts as passive and unchanging things "out there" — Billig argues that social norms, like situations:

...cannot merely exist as constraints existing outside individuals. For social norms to function as social pressures, they must be internalized, and thereby form part of the individual's cognitive beliefs (1991, p. 127).

Cognitive/ideological contents and situations are, at once, both internal and external to the individual.

Billig cannot, therefore, study the individual which has been abstracted from his/her milieu. Instead, by proposing language as the object of analysis, he is able to negotiate the indexical nature of social psychological phenomena, and the constructive (performative) nature of language use (cf. Edwards & Potter, 1992; Parker, 1992; Potter & Wetherell, 1987). According to this view, cognitive style is an immediately social and contextual phenomenon, and individuals are expected to display variability in cognitive style as they use language to perform different functions in different contexts. In addition, Billig situates language use in a rhetorical context: "the context of opinion-giving is the context of argumentation" (1991, p. 17; Billig, 1987a). Since individuals are persuading and criticizing others when they use language, the context of opinion giving — which is also the context of cognitive style — is inherently evaluative and emotive.



Unlike Tetlock's account of cognitive style which originated in information processing theory, but in accordance with Frenkel-Brunswik's early description of intolerance of ambiguity, Billig stresses the emotive/evaluative aspects of cognitive style.<sup>17</sup> In contrast to Frenkel-Brunswik, however, these emotive aspects do not derive from deep psychological processes, but are emergent from dialogical social relations.

Billig's conception of cognitive style also has descriptive parallels with Frenkel-Brunswik's description of intolerance of ambiguity; the notion of evaluative categorization is central to both accounts. Billig (1982) uses the term *balance-as-consistency* to characterise the Manichean thinking that has traditionally been attributed to the authoritarian, and *balance-as-counterweight* to depict the flexible and ambivalent style of the tolerant person. Where balance-as-consistency is a cognitive style which seeks to attain balance by bolstering one value at the expense of another, balance-as-counterweight is an ambivalent cognitive style which is distinguished by inconsistent cognitive elements which coexist in a manner characteristic of tolerance of ambiguity. However, in contrast to Frenkel-Brunswik's theorizing, these cognitive styles are manifest in a rhetorical context, and cannot be reduced to properties of individual personality. Thus, besides emphasizing individual variability in cognitive style, Billig approaches Frenkel-Brunswik's conception of intolerance of ambiguity on a descriptive level by stressing the emotive/evaluative features of cognition associated with ambivalent and unambivalent categorizations.

As with Tetlock's theory, the notion of value/cognitive conflict is central to Billig's conception of cognitive style. However, Billig's understanding of values, value conflict, and the resolution of dilemmas differs markedly from Tetlock's. These differences stem from Billig's rejection of the dualism which is implicit in Tetlock's theory. Instead of arguing that universal psychological phenomena (consistency motives) engage external entities (values), Billig (1982) poses the question: "What makes two psychological elements come to be perceived as being inconsistent with one another?" (p. 141). For Tetlock, this is a banal question. By drawing on Rokeach's (1973, 1979) conception of "supraindividual", "universal", and "terminal" values, it is obvious to Tetlock that conflict ensues when an individual recognises that a belief satisfies one value at the expense of another. This is not obvious to Billig since he acknowledges cultural and contextual variability in value conflict, and cannot assume that individual's privately ascribe a "definite value" to an external belief. Offering one's children to the gods, for instance, may arouse conflict in one culture but not in another. Billig thus responds to his question by arguing

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<sup>17</sup> More recently, Tetlock (1993) has acknowledged that the "identity of integrative complexity as a purely cognitive construct has been challenged" (p. 384).

that "the simple answer would be to refer to norms and assert, for example, that two elements are inconsistent if it is generally accepted in the given cultural context that they are inconsistent" (p. 141). The non-resolution of dilemmas such as sacrificing children to the gods is not attributable to a faulty ascription of "definite value", or to the breakdown of psychological consistency dynamics (between the value of sanctity of the life and of respect for the gods), but can be translated into "much more obvious statements about social desirability and conformity to norms" (Billig, 1982, p. 142).<sup>18</sup> Thus, social and rhetorical influences, as well as contexts, are integral to all expressions of cognitive style, and cannot be separated from individual traits.

Two implications follow from Billig's conception of values and value conflict. Firstly, the processes which are employed to achieve conflict resolution, and the ends toward which they aim are substantially different from Tetlock's theory. Tetlock's conflict resolution involves developing more highly differentiated and integrated cognitive systems with the aim of finding logical/correct solutions to the dilemmas. In response to a value dilemma, Tetlock's (1986) asks: "What common metric can be used to compare the value of human lives saved as a result of costly industrial safety regulations against the economic losses associated with those regulations?" (p. 819). By seeking different implications of each path of action (differentiation), and weighing and balancing these in relation to each other (integration), Tetlock suggests that an individual may find some criterion in the world whereby the two values may be compared and the conflict may be resolved. In this sense, Tetlock's notion of conflict resolution is empiricist. It refers to formal internal mental operations on a static, knowable, external world (under assumptions of empirical realism). In contrast, Billig suggests that individuals may draw on contrary themes of commonsense (or discourses) in order to construct an issue in one particular way or another (Billig *et al.*, 1988; Edwards & Potter, 1992; Potter & Wetherell, 1987; Parker, 1992). He recognises that the conflict between human life and economic profit, while real within a particular socio-historical context, is not some basic feature of the world which the mind may recognise, ascribe a "definite value", and "resolve". According to rhetorical psychology, ambivalent cognitive styles originate from drawing on conflicting (social) themes in the context of argumentation and persuasion, not in mental operations on an external world. In this sense, cognitive style emerges out of dialogical social relations rather than the functioning of a psychological mechanism. Although Tetlock's

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<sup>18</sup> Billig uses the term "norms" in a non-normative sense. In agreement with discourse theory, norms are not viewed as stable cultural entities, but as a set of discourses (or themes of commonsense) which have become institutionalized through historical processes, and which are ideological and sustain power relations (cf. Billig, 1991; Billig *et al.*, 1988; Parker, 1992; Wetherell & Potter, 1992). This view of norms posits that, within any context, an individual may endorse many conflicting discourses (contrary themes of commonsense). Of course, this opens up a field of enquiry regarding norms, conformity, and desirability which is beyond the scope of this chapter.

studies of accountability support this basic claim, in the Billigian framework, people are always accountable in rhetorical contexts of language use. Individual traits cannot be separated from (situational) accountability.

Secondly, Billig's notion of values and conflict resolution open an avenue to theorize both individual variability in cognitive style over content and context, as well as a necessary relationship between the style and content of cognition in a particular context. Since particular belief contents (i.e., discourses, themes of commonsense) are normative in certain contexts, individuals who endorse other, non-normative contents are expected to adopt flexible and ambiguous cognitive styles if they are to be rhetorically persuasive. Racist beliefs, for example, when advanced in a liberal or anti-racist context, are highly ambivalent (Billig, 1988a; van Dijk, 1992; Wetherell & Potter, 1992). Thus, while recognising individual variability, by taking account of the context of interaction and thinking, Billig can accommodate a necessary relationship between ambivalent cognitive styles and ideological beliefs.

This relationship between the content and style of cognition is central to what Billig (1978) refers to as "the paradox at the centre of the concept of authoritarianism". He argues that, far from measuring intolerance of ambiguity, the F-scale was "deliberately constructed to contain the very ambiguities, hedgings and lack of categorical assertion which are supposed to threaten the authoritarian" (p. 59)! In America of the 1940's, Billig explains, some tenets of fascism conflicted with the generally held norm of democracy. Consequently, statements of hostility against a minority group were "tempered and disguised by means of a compromise with democratic ideals" (Adorno *et al.*, 1950, p. 60). Since deviance from normative beliefs has been shown to have emotive correlates (Asch, 1956; Bogdanoff *et al.*, 1961), and since beliefs and values not only "locate one in a culture...but also constrain the organization of the self" (Hermans, Kempen & van Loon, 1992, p. 28; Davies & Harré, 1990; Sampson, 1993; Shotter & Gergen, 1989), these ambivalent cognitive styles are also expected to have an inseparable affective component, rather than being purely formal and private mental operations.

Billig thus offers an alternative to the universalistic theories of cognitive style which have characterized the psychological literature. His conception of cognitive style has many parallels with Frenkel-Brunswik's description of intolerance of ambiguity: it includes both the features of ambivalent categorization, and its emotive/evaluative correlates. By focusing on language as the object of analysis, though, Billig has no need to go beyond manifest tolerance/intolerance of ambiguity, and theorise its status as a personality variable or as a law-like cognitive process. In contrast to Tetlock and the learning theorists, cognitive style is not seen as a function of private

mental activity, but as originating in a rhetorical context. Ambivalent cognitive styles are argued to result from an individual's negotiation of contrary, shared themes of commonsense. Also, by incorporating insights regarding the indexical and performative aspects of language, he theorizes the inherently context- and content-bound nature of manifest cognitive style.<sup>19</sup> By rejecting the individual as the locus of explanation, Billig may advance beyond Tetlock and the learning theorists by rejecting the trait-like nature of cognitive style unequivocally. In addition, however, by arguing that values and opinions which are unpopular within a particular context will require more flexible and complex cognitive styles, Billig may theorize a necessary relationship between the style and content of cognition in a particular context. Chapter 6 presents a dialogical account of individual variability, and an anti-universalistic account of individual differences in cognitive style, mediated by ideological content and context.

## Conclusion

In contrast to the Popperian notion of falsification, it appears as though theoretical change does not flow all too easily from our being "disappointed in our expectations". At least for the body of literature under consideration here, two complementary processes have frustrated attempts to escape an empiricist ontology: the ontology has been assumed by the methods of observation, and unexpected observations have been accommodated by interactionist theory, which leaves an empiricist ontology intact.

As this chapter has argued, in contrast to Frenkel-Brunswik's description of tolerance/intolerance of ambiguity, later research has gradually assumed ambiguity tolerance to be a generalized personality trait. On the basis of observed differences in the talk of prejudiced and non-prejudiced individuals, Frenkel-Brunswik originally defined intolerance of ambiguity as an evaluative "attitudinal variable" which is manifest in Manichean categorizations of social "objects". Her "prime concern" was then to test a theory that these differences in talk were attributable to the underlying dynamics of a generalized personality trait. Ensuing research has, however, assumed intolerance of ambiguity to be a generalized personality trait by developing asocial and non-evaluative measures of the construct which apportion each individual a single score to represent her/his position along the continuum of traits. Accordingly, being disappointed in our expectations has proved rather difficult, as our means of observation has incorporated

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<sup>19</sup> Compare this conception of cognitive style with the contextual and dialogical accounts of meaning (Barwise, 1988; Rommetveit, 1990).

assumptions which do not allow a fair test of theory. Moreover, being task specific and ideologically biased, the single scores of cognitive style which have been derived from experimental and scaling measures of cognitive style have possessed little construct validity. The literature which has sought to investigate the generality of cognitive style is thus difficult to assess.

More recently, interest in individual variability in cognitive style has gained the attention of researchers, and a few procedures have been developed in order to test for possible individual variability. Even here, though, the results have been mixed. Although individual variability has generally been identified, the research has also suggested that cognitive traits may be partially generalized over circumscribed content domains and facets of cognitive structure. In addition, observed individual variability has been accommodated by interactionist models of personality, and has not threatened the empiricist assumptions which underlie an individualistic psychology of cognitive style.

Consequently, not only have measurement assumptions made theoretical change difficult, but institutionalized theoretical orientations have accommodated conflicting observations. It is thus necessary first to detail theoretical alternatives to a universalistic conception of cognitive style, then derive methodological procedures which may allow a fair test of the basic assumptions of this theory. In other words, it is necessary to break from one methodological circle and enter another, hopefully, more productive one, grounded in a sound philosophy of science.

The insights from Billig's rhetorical psychology have been used to sketch an alternative, anti-universalistic theory of tolerance/intolerance of ambiguity. Billig argues that the "thinking society" should be the proper object of social psychological analysis. Accordingly, the analysis of conversation and rhetoric provides an appropriate framework by which to understand the 'cognitive processes' of the thinking society. By emphasizing the inherently context- and content-bound nature of talk, this model provides a radical shift away from a universalistic theory of cognitive style. Nonetheless, it has many descriptive commonalities with Frenkel-Brunswik's original formulation of intolerance of ambiguity. Intolerance of ambiguity is seen as an evaluative "attitudinal variable" manifest in unambiguous categorization.

Due to measurement assumptions and methodological problems with previous research, however, the empirical evidence that would justify a shift to an anti-universalistic conception of cognitive style remains equivocal. No firm conclusions can be drawn regarding whether or not individual cognitive style is indeed variable over context and content domain. As this chapter has argued,

the vast majority of research has incorporated into its measurement instruments the assumption that cognitive style is a generalized trait-like phenomenon. The research which has sought to test the generality of cognitive style has generally either been inconclusive because of methodological problems, or has produced mixed findings which have typically been assimilated by interactionist models of personality, and have left the possibility of a trait-like notion of cognitive style intact. The next chapter aims to develop a measure of cognitive style which overcomes some of the methodological problems with previous measures, and tests whether tolerance/intolerance of ambiguity is a generalized trait.

# Investigating variability in tolerance of ambiguity

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*In short we know that the facts are theory dependent and changeable; and that science itself appears...as a historical process of levels and connections, a weighted network, without foundations, developing in time. This view does not dispute the epistemic value of experience. However, it interprets this not as the absolute privilege of a content, but as dependent upon the ontological and social contexts within which the significant experience occurs.*

(Roy Bhaskar, 1989b, p. 96)

Thus far the thesis has argued that social psychological theories of the relationship between cognitive style and ideological beliefs have been bedeviled by an underlying tension between empiricist theoretical universalism, and the potential to sustain political critique. In addition, it has been suggested that universalist assumptions have been incorporated into measurement procedures which have presumed cognitive style to be a stable and general property of individual psychology. Moreover, even findings which demonstrate individual variability have been accommodated by universalistic theory. Because of the degree of circularity which exists between theory and observation, the evaluation of theoretical assumptions within the discipline has proved complex. Consequently, an anti-universalistic account of the relationship between cognitive style and ideological beliefs has been difficult to establish.

Where the previous chapters have been descriptive and critical, the following two escape the impasse which has been reached by evaluating the universalistic conception of cognitive style empirically. The substantive aims of this chapter are twofold: to develop a measure of tolerance/intolerance of ambiguity which can test the assumptions of generality, and report the findings of a study which investigated cross-content variability in ambiguity tolerance. The results show a high degree of cross-content variability in intolerance of ambiguity, and question the

common assumption that ambiguity tolerance is a generalized trait-like property of mind. The following chapter reports the findings of two studies which use this measurement procedure to examine the relationship between tolerance/intolerance of ambiguity and ideological beliefs.

Since this is the first chapter to report empirical data, it is appropriate to begin with a discussion of the role that observation plays in this thesis. For an empiricist psychology, observation is unproblematic, and there is little need to digress from the well-worn hypothetico-deductive path (Kimble, 1989). This practice is sustained by a philosophy of science which rests on the assumption that theory, guided by value-free observation, may mirror reality. It is precisely this assumption which is brought into question by recognising the theory-bound nature of observation (as in the "methodological circle"). The mounting critique which has been levelled against empiricism has argued that, since observation is theory-dependent, it is not feasible to ground theoretical certainty in observation. Instead, it is possible that incommensurable, independent, and circular bodies of knowledge (theory) may co-exist, with no value-free, second-level theory or observation by which to evaluate them (Feyerabend, 1975; Kuhn, 1970; Rorty, 1979, 1991). Thus, in contrast to an empiricist foundationalism — based on observation and rooted in a correspondence theory of knowledge and reality — the radical relativist alternative which has recently been proposed questions the role of observation in science.

At the opposite extreme to empiricist foundationalism is a post-Marxist (Eagleton, 1991) or postmodernist (Simons & Billig, 1994) philosophy which questions empiricist correspondence theory, postulates a radical indeterminacy between theory and reality, and consequently, rejects theory, epistemology, and the role of scientific observation (e.g., Feyerabend, 1975; Fish, 1985; Rorty, 1991). The present work takes a middle way between empiricist foundationalism and postmodern radical relativism by drawing on a critical realist philosophy of science.

## **Critical realism: ontology, epistemology, and methodology**

In response to the possibility of Cartesian doubt, an empiricist philosophy of science strives for certainty by grounding knowledge in the observation of "constant conjunctions of events" which, under a Humean-Hempelien conception of cause, are used to identify a law-like, mechanical reality (Bhaskar, 1975, 1989b; Chalmers, 1988). Empiricist foundationalism is thus established on the assumptions that (a) observation gives clear, value-free access to reality, and (b) the knowledge derived from scientific observation may reflect or correspond with reality (cf. Hempel, 1965). Both of these related assumptions are untenable. First, value-freedom and



scientific objectivity do not exist (Danziger, 1990; Kuhn, 1970); and moreover, "an unbridled lucidity can destroy our understanding of complex matters" (Polanyi, 1967, p. 18). Second, representationism (a correspondence theory of truth) has been criticised for it rests on the (metaphysical) assumption that the world takes the shape of a concept, or that language and observation may give us untroubled access to the real — i.e., that language "cuts reality at the joints" (Rorty, 1991, p. 80; Quine, 1953; Lakoff, 1988). This, Bhaskar has called the *ontic fallacy*, "the ontologization and hence naturalization (and thence eternalization) of knowledge, and so its compulsive determination by being" (1989b, p. 181). By establishing causal laws through observing constant conjunctions of events, the Humean account of science, Bhaskar (1975, 1989b) contends, ignores an ontological distinction between causal laws and patterns of events, depends on a "misidentification" of causal laws and their empirical grounds, and correspondingly, ontologizes knowledge.

A number of philosophies have reacted against empiricist foundationalism and its assumptions of scientific objectivity and representationism.<sup>1</sup> These have recognised the theory-bound nature of observation, have taken seriously the constructive or performative powers of language, and have concluded that empiricist foundationalism has no foundation (Austin, 1962; Bhaskar, 1975, 1986, 1989b; Kuhn, 1970; Polanyi, 1967; Quine, 1953; Rorty, 1979, 1991). There can be no theoretical certainty because 1) different knowledges may derive, not from error in mapping reality, but from the theory-bound nature of observation (cf. Shotter, 1993a), and 2) that there is no value-free, second-order language or theoretical system — what Rorty (1991) calls a 'God's eye view' — by which to choose which theory comes closer to a true account of the world (cf. Feyerabend, 1975). Accordingly, anti-foundationalist philosophies of science recognise epistemological relativism.

It is here that critical realism differs from post-Marxist, postmodernist, and neo-pragmatist accounts. Bhaskar (1989a) agrees that "all beliefs are socially produced, so that all knowledge is transient, and neither truth-values nor criteria for rationality exist outside historical time" (p. 57). However, in contrast to the radical relativist thesis, he does not proceed from epistemological relativism to the irrationalist conclusion that all beliefs are then equally valid (i.e., judgemental relativism). This movement from epistemological to judgemental relativism is characteristic of theories which, by drawing on the arbitrary relationship between signifier and signified, have used post-structuralist insights to argue that there is "nothing beyond the text"

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<sup>1</sup> Since empiricist foundationalism concerns the relationship between signifier and signified (theory and reality), the crisis in the philosophy of science is a variant of the broader (modern) problem surrounding signification and meaning (cf. Eagleton, 1983; Eco, Santambrogio & Violi, 1988).

(Derrida, 1976, p. 158); or, as Eagleton (1991) says in criticising the post-Marxists, that "objects are *entirely* internal to the discourses which constitute them" (p. 205, emphasis added). Similarly, Bhaskar (1989b, chap. 8) has reproached Rorty for (wrongly) inferring that "there is no way to know that a thing exists (or acts) independently of a particular description" from the legitimate claim that "there is no way to know a thing except under a particular description". In the hands of Rorty (and others), Bhaskar and Eagleton argue, the epistemological relativist position leads to anti-realist thesis.<sup>2</sup>

Once the relationship between theory and reality is judged to be arbitrary — as it is, for example, in Rorty's (1991) abandonment of epistemology or Fish's (1985) rejection of theory as inconsequential — an anti-realist ontology and judgemental relativism follow. Since reality is collapsed into discourse, it becomes impossible to judge that a discourse had constructed an object validly, that one set of experiences is more authentic than another, or that any particular political perspective is more beneficial than any other (Eagleton, 1991; Parker, 1992; Simons, 1985; Simons & Billig, 1994). By inferring judgemental relativism from epistemological relativism, postmodern philosophy has progressed from an anti-foundationalist philosophy of science to an anti-realist position. In consequence, all observation in science is rendered futile, for the statement that one set of observations is closer to reality is rendered absurd.

Although the thoroughgoing relativism of postmodern theory strikes one as immediately antithetical to empiricist foundationalism, this opposition has been deconstructed. In his adroit manner, Eagleton (1991) has shown the unity between empiricist correspondence theory of truth and the "vicious relativism" of postmodernism. He argues that, by collapsing signifier and signified, the anti-realist position of Hindess & Hurst (1977) merely inverts the empiricist model they wish to destroy:

...whereas empiricists thought the signifier is thought to follow spontaneously from the signified...now it is a question of the signified following obediently from the signifier (p. 208).

By taking the theory-bound nature of reality to its logical extreme, the anti-realist thesis promotes a new form of representationism: all description is reduced to value judgement (construction).<sup>3</sup>

In his efforts to reclaim reality, Bhaskar has developed a parallel critique of both empiricism and anti-realism. Because his interests involve the relationship between theory and reality (and

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<sup>2</sup> Harré (1992a) offers a similar criticism of Gergen's (1991) postmodernist psychology expounded in *The saturated self*.

<sup>3</sup> In practice, few psychologists have endorsed this extreme formulation. Instead, like Potter & Wetherell (1987), they rely on an unexplained voluntarism to link explanation to reality (cf. Bowers, 1988).

epistemology and ontology), Bhaskar speaks of the transitive and intransitive realms instead of signifier and signified. However, much the same distinction is being marked: the transitive realm is a linguistic one of signifying practices — rhetoric, metaphor, and narrative — where meaning is indexical and self-referential; whereas, the intransitive realm refers to an external reality, the signified.

Bhaskar argues that the anti-realist and empiricist positions are analogous since they both subscribe to the *epistemic fallacy*: the definition of being in terms of knowledge. By claiming that "every meaningful statement is...translatable into a statement about immediate experience", empiricism implies that the truth about reality (a meaningful statement) may be reduced to knowledge of reality as derived from observation (Quine, 1953, p. 38; see also Eco *et al.*, 1988). This leads empiricism quickly to the ontic fallacy which ontologizes knowledge by assuming that (true) knowledge represents reality; the intransitive realm mirrors the transitive realm. In his critique of Rorty, Bhaskar (1989b) argues that Rorty has rejected the ontic fallacy, but, by remaining committed to the epistemic fallacy, he adopts an anti-realist position. To oversimplify the argument, Bhaskar contends that Rorty reaches an anti-realist thesis by recognising epistemological relativism, but, because he remains committed to the epistemic fallacy (the definition of being in terms of knowledge), he draws the (false) conclusion that reality is thoroughly indeterminate. The result is that "Rorty has furnished us with a post-epistemological theory of knowledge without justification which *matches* his account of science without being" (Bhaskar, 1989b, p. 160, emphasis added). Consequently, because of the radical indeterminacy of being, observation is useless to science. Rorty has inverted empiricism.

Critical realism rejects the anthropomorphic, epistemological definition of being in terms of knowledge, but does not deny the reality of events and discourses. On the contrary, critical realists insist upon a real, for "we will only be able to understand — and so change — the social world if we identify the structures at work that generate those events or discourses" (Bhaskar, 1989b, p. 2). These structures are not reducible to observed patterns of events as empiricists contend, neither are they the mere products of discourse, but are casually prior to events and discourse, and can only be identified through "practical and theoretical work". In other words, critical realism allows for the existence of a independent, non-anthropomorphic reality.

Bhaskar (1975) has provided a powerful transcendental argument to the effect that the world must be characterized by "natural necessity, causal complexity, and emergent powers" if science as we know it is to be possible. For, what is significant about the pattern of events which scientists co-determine in their (controlled) experimental activity is that it enables them to identify "the

mode of operation of structures, mechanisms or processes which they did not produce" (Bhaskar, 1989a, p. 9). In contrast to empiricism, causal structures are not reduced to patterns of events. If the pattern never occurs in the uncontrolled real world — "autumn leaves rarely, if ever, fall to the ground in accordance with the law of fall" (Chalmers, 1988, p. 18) — this does not mean that the causal structures do not exist in the world. Instead of identifying causal laws with regularities of events (i.e., an anthropomorphic epistemology), Bhaskar argues for an independent reality, consisting of powers, tendencies, and generative mechanisms.

Eagleton has provided a similar argument against anti-realism: the rationality and intelligibility of our activity is determined by the real nature of the objects we act on. He argues that despite the fact that 'wine' and 'wallabies' may signify different things for different cultures (in the transitive realm), "this does not mean that they stock their off-licences with wallabies or encourage their children to feed bottles of wine in their zoos" (1991, p. 204). While recognising the socially constructed nature of beliefs, critical realists dispute Rorty's (1991) claim that an object "cannot suggest beliefs for us to hold" (p. 83).

The distinction between the transitive and intransitive realm thus allows us to establish epistemological and moral/political criteria for 'truth' (i.e., adequacy of explanation). We are not reduced to the Rortian conclusion that "'human nature' is not a useful moral concept" (1991, p. 31), for the underlying (intransitive structures) of real humans demand that they need sustenance and shelter, despite the fact that in the transitive realm they may live in igloos and eat raw fish, fried eggs, or other humans (cf. Harré, 1992a). Bhaskar, however, insists on the non-identity of (or ontological gap between) the transitive and intransitive realms. He recognises the non-representational nature of language and theory, but as an epistemological criterion "relegates the notion of correspondence between [theory and reality] to the status of a metaphor for the aim of an *adequating practice*" (1989b, p. 23). Critical realism thus stands opposed to both (a) epistemic absolutism, since it recognises that all beliefs are socially produced, transient, and theory-bound, and (b) epistemic irrationalism, since it admits an external real, and posits rational grounds for preferring one belief to another.

The real, however, is not like a concrete slab upon which one may stumble. The structures which Bhaskar (1986, 1989a, 1989b) proposes for the human sciences are social-relation-dependent, praxis- and concept-dependent, and manifest a material-space-time specificity and substantial geo-historicity. This means that the scientist must move from manifest phenomena such as Humean empirical regularities, to the structures that generate them — that is, from a substance-like mechanical ontology (e.g., personality traits) to a emergent ontology in which historical things

are viewed as "ensembles of tendencies, liabilities and powers" (Bhaskar, 1989a, p. 19), or Gibsonian "affordances" (Parker, 1992; Shotter, 1993a). This, of course, does not imply that critical realists seek an "honest-to-God, down-home, accurate representation of the way the world is" (Rorty, 1984, p. 3).

On a concrete level, critical realism has substantial implications for the conception and measurement of cognitive style. Most obviously, it means that cognitive style should not be viewed as a property of individual psychology, or that factors of cognitive style be seen as dimensions of personality. This conception originates in the ontic fallacy, where (static, surface) correlation matrices and factor structures have been used to represent the world (i.e., human psychology), despite the fact that the observation and representation are thoroughly theory-bound. Empiricist psychology assumes that cognitive traits are generalized psychological phenomena which may be (theoretically and methodologically) abstracted from their context of manifestation. Instead, critical realist theory would argue that manifest correlations between cognitive style and ideological beliefs or between different indices of cognitive style are emergent surface phenomena, attributable to underlying generative structures which, under particular context- and content-bound conditions (e.g., the experimental situation), may conjoin in certain observable ways. Critical realism therefore implies a change in the *object* of research: from constant conjunctions — which via the ontic fallacy and the assumption of correspondence are given ontological status by empiricism — to underlying generative structures. While these structures may not be determinate (because of the non-identity between the transitive and intransitive realms), they are generative and their operations may be understood by investigating their effects (i.e., the nature of the reproduced outcomes which they generate). It is imperative, therefore, that a measure of cognitive style be developed which enables the researcher to capture the potential for individual variability, and the context- and content-bound nature of expression of cognitive style. This will assist in distinguishing between the validity of the empiricist and critical realist ontologies. These models of reality may be evaluated by employing a measure which allows the researcher to examine the differential manifestations of cognitive style that these models expect.

By averring the non-identity of the transitive and intransitive realms (i.e., epistemological relativism), critical realists realise that correspondence is nothing more than a metaphor (Bhaskar, 1986, 1989b; Greenwood, 1992b). Unlike empiricist science, critical realism is not ensnared by the ontic fallacy into believing that to record constant conjunctions is to document reality. Bhaskar recognises the degree to which reality is constituted by observation and theory. Nonetheless, "correspondence" is a metaphor which can provide some kind of limit to what is considered adequate knowledge. While it is true that all measurement incorporates ontological

assumptions, this does not mean that measurement instruments and their associated theories construct reality *in toto*, or that there is no way of judging which measurements (and associated discourses) allow a better "representation" of reality. On the contrary, it is possible for example, to establish/communicate criteria whereby one could test whether cognitive style is manifest as a generalized personality trait or as an inherently context- and content-dependent phenomenon. Such a test will allow us to make plausible judgements as to which ontology is more appropriate for the study of cognitive style.

The critical realist philosophy of science meshes nicely with a rhetorical account of cognitive style. The dialogical nature of cognitive phenomena proposed by rhetoricians implies that any surface manifestation of cognitive style is emergent and causally dependent upon social relations which operate in particular contexts. Moreover, like critical realists, rhetoricians endorse neither a correspondence theory of truth nor an antirealist "vicious relativism". They hold fast the notion of objectivity, in a "minimal sense", without making substantial epistemic claims about "knowing what is really 'out there'" (Keith & Cherwitz, 1989, p. 204; Nelson & Megill, 1986). More to the point, rhetoricians are interested in the relationship between language and power, and are aware of the real effects that institutions and ideologies have on the style and content of cognition (Harriman, 1989; McCloskey, 1985). Thus, both aver a non-identity between the transitive and intransitive realms, but acknowledge the existence of non-anthropomorphic "things out there", and their impact on language and thought.

The study of rhetoric has two potential contributions to make to a theory of cognitive style. Firstly, rhetoric provides an appropriate model of the structured, relational, and emergent features of cognition which critical realism recommends we study (cf. Billig, 1985a, 1987a, 1993; Billig *et al.*, 1988). Rhetoric assists in shifting from an individualistic conception of social structure to a critical realist definition of structure in terms of "systems of human relationships among social positions" (Porpora, 1989, p. 195). Secondly, the study of rhetoric may help to give content to the generative structures which impact on cognitive style. Analyzing the usage of different cognitive styles may assist in identifying and studying the particular relational structures which generate manifest patterns of cognitive style. This twofold distinction corresponds roughly with the methodological distinction which Bhaskar derives from his model of science; between:

...the *social sciences*, which abstract from human agency, studying the structure of reproduced outcomes; and the *social psychological sciences* which abstract from reproduced outcomes, studying the rules governing the mobilization of resources by agents in their everyday interaction with one another and with nature (Bhaskar, 1989b, p. 93, emphasis in original).

The empirical research reported in this thesis employs these two methodological strategies to explore the different uses to which the study of rhetoric may be put in investigating cognitive style. This and the following chapter adopt the methodology of the social sciences to investigate the structure of reproduced outcomes. Quantitative methods are used to investigate the stability and generality of cognitive style, and the relationship between cognitive style and ideological beliefs. This research aims to identify the structure of reproduced outcomes in order to supply empirical grounds for shifting from an empiricist to critical realist ontology and conception of cognitive style. Chapter 6 studies the rules governing the mobilization of resources — the use of tolerance and intolerance of ambiguity — in practice. This involves the analysis of rhetoric, and the methodology is qualitative. This research aims to identify the generative structures underlying the use of cognitive style in a rhetorical context.

The remainder of this chapter proposes a measure of tolerance/intolerance of ambiguity which allows for the observation of possible variability in cognitive style over different content domains, and employs this measure to examine the plausibility of an anti-universalistic theory of cognitive style. The aims are modest. The study does not strive to identify underlying structures, causal laws and the like. It merely aims to investigate the plausibility of two models of cognition. Of course, the observation is filtered by theoretical assumptions (e.g., numerical data), but I do not assume that what is being observed is the ‘reality’ of cognitive style. Instead, the study aims to explore the effects of underlying generative structures in an effort, not to derive predictive models, but to examine the validity of two diametrically opposed explanations of the causal structure underlying manifest expressions of cognitive style: one, property-like and stable; the other, emergent and variable.

## **Measurement**

While all measurement is theory-bound and rooted in ontological assumptions, this does not mean that all measurement instruments are equally worthless. On the contrary, some measures allow the researcher to examine the assumptions upon which others are based (i.e., methodological reflexivity), thus allowing an evaluation of the former assumptions. This is clear from the measurement of cognitive style discussed in the previous chapter. An array of measures have been employed which have explicitly ruled out individual variability in cognitive style. These have treated cognitive style as an asocial and non-evaluative trait, and have assigned each individual a single score to represent his/her characteristic trait-like style. Only two measures — Tetlock’s integrative complexity coding scheme, and Scott’s measure of object ambivalence —



have been designed in a manner which allows the researcher to examine the assumption of generality. These are surely better in the context of a body of literature which must first establish the generality of cognitive traits before proposing theories which assume the existence of generalized cognitive traits.

Due to a number of theoretical and methodological difficulties, the measures proposed by Scott and Tetlock are inappropriate for the present purposes. The rhetorical approach to cognitive style recommends an evaluative construct which, like Frenkel-Brunswik's description of tolerance/intolerance of ambiguity, includes features of ambivalent versus unambivalent categorizations of meaningful social objects (see pp. 66-67). Thus, in addition to assessing individual variability in cognitive style, the present work seeks to define cognitive style as an attitudinal variable reflecting evaluative categorization. Although the integrative complexity coding scheme may capture ambivalence, this is tangential to its explicit purpose. It was originally developed as a measure of the formal aspects of information processing, and assesses the complexity of thought with reference to "the *number* of evaluative distinct dimensions of a problem that an individual *takes into account*" (Tetlock *et al.*, 1989, emphasis added). Taking a number of evaluative dimensions into account, however, does not necessarily imply evaluative conflict for the subject concerned. Take for example, the instance of highest integrative complexity recorded by Tetlock *et al.* (1989):

I can see why people disagree with capital punishment. A lot depends on whether you look at the issue from the point of view of the victims or from the point of view of the criminals. Victims want revenge. Criminals want leniency — and leniency may be justified sometimes depending on the circumstances. On balance I support the death penalty, but only when there is no doubt regarding guilt and only when the crime is especially vicious (p. 635).

Although this extract shows moderate to high integrative complexity, it does not necessarily imply subject ambivalence. Few Americans would support the death penalty for innocent persons or for individuals accused of minor crimes. Obviously, the victim's evaluation of the death penalty will differ from the criminal's. However, merely being able to see and take account of different sides of an issue does not mean that one believes/feels them to be relevant, or agonizes over them. This subject may deny the sanctity of life and endorse capital punishment unequivocally in instances of murder. Integrative complexity does not imply ambivalence or tolerance of ambiguity.

In addition, there are a number of methodological difficulties with Tetlock's measure. Firstly, the integrative complexity coding scheme may confound cognitive style with cognitive contents. Scott *et al.* (1979) argue that since the raters are exposed to both the style and content of cognition when coding their texts, explicit ideological contents may insidiously impact on the



recorded cognitive simplicity-complexity. Due to cultural stereotypes and the ideological values of the raters, conservative contents may, for example, be rated as less integratively complex than liberal contents. Additionally, the types of contents which the research subjects endorse in a particular context may influence their integrative complexity scores. For example, if the sample is selected from a liberal context, conservatives may need to employ more complex arguments to justify their beliefs, resulting in conservatism being correlated with integrative complexity (see e.g., Tetlock *et al.*, 1989). Thus, despite Tetlock's (1993) insistence that the integrative complexity coding scheme assesses "*structure*, not *content*, of expressed beliefs and is not biased for or against any particular ideology" (p. 382, emphasis in original), it may very well be biased. This raises the perennial difficulty of confound when interpreting the relationship between cognitive style and ideological beliefs.<sup>4</sup> Significant correlations between the style and content of cognition may be spurious, originating in covert assumptions of the coders, or the relationships may be attributable to a dynamic between content and context.

Secondly, Tetlock's measure includes no way of assessing the effect of a "coding set" which the raters may develop, particularly when coding longer extracts of talk. After recognising instances of cognitive complexity in an early part of a text, for example, raters may tend to code the full text as cognitively complex. This would portray individuals as more consistent than they are. While all these criticisms undermine the validity of the measurement procedure, the external factors which structure coding (i.e., text content, and coding set) would lead to an increased, but spurious, coder reliability.

Scott's measure of object ambivalence, in contrast, constitutes an advance over previous measures of ambiguity tolerance because, in addition to allowing the researcher to assess cross-content variability in cognitive style, it includes both social content and the evaluative aspects of intolerance of ambiguity.<sup>5</sup> However, the task that Scott employs to assess ambivalence is deeply problematic since it entails a translation of meaning between the subject and the experimenter. For example, the adjectives "strict" and "lenient", while being coded as negative and positive respectively, may have the opposite meaning for the subject who selects them. One can never be sure that the subject views the adjective in a similar manner to the experimenter. Scott must assume that his adjectives have fixed (empiricist) meaning. This problem is compounded when undertaking cross-content investigations in ambiguity tolerance. It must be assumed that "lenient",

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<sup>4</sup> Integrative complexity scores are also potentially confounded with other variables. Higher integrative complexity scores are likely to be associated with longer responses, and with greater rhetorical and linguistic sophistication.

<sup>5</sup> The procedure which Scott uses to measure object ambivalence is discussed on p. 83.

for example, has the same connotation when employed to evaluate very different contents, including parents, nations, teachers, employers, the courts, etcetera.

Measuring tolerance/intolerance of ambiguity is a complex undertaking. In addition to difficulties in defining the construct and screening out extraneous variables which may influence measurement, complications stem from the ambiguity of the content-style link. On the one hand, it is imperative to weld style onto particular contents. This is a basic requirement of a measure which aims to assess cross-content variability in cognitive style. However, once the measure of cognitive style is confounded with cognitive contents, it becomes difficult to interpret observed relationships between cognitive style and ideological beliefs. This is a problem for the measurement scales such as the Budner scale, as well as for Tetlock's measure of integrative complexity.

In the studies which follow, the unipolar scaling procedure, originally developed by Kaplan (1972), will be modified and employed as the principal measure of cognitive style. Although Kaplan was primarily interested in psychometric issues, his unipolar scaling procedure is ideal for the purpose of measuring the attitudinal variable of ambiguity tolerance. To assess ambivalence, Kaplan developed a procedure to measure the "liking" and "disliking" components of an attitude separately. To this end, he employed two independent unipolar scales: one assessing the degree of liking toward the item; and the other, the degree of disliking. Unlike bipolar scales (e.g., the Likert scale and the Semantic Differential), which assume that the more a person agrees with a statement (i.e., marks the *agree* pole) the less they disagree with the statement (i.e., their mark is further from the *disagree* pole), the unipolar scaling procedure does not presume psychological rationality. Accordingly, it is possible to measure cognitive style directly from the style of response, without inferring an underlying stylistic trait from responses to attitudinal content. The unipolar scaling procedure allows the respondent to express unambivalent acceptance or rejection, or varying degrees of ambivalence toward an object. The modified version of the scale — to be called the Attitudinal Ambiguity Tolerance scale (AAT) — and instructions are reported in Figure 4.1.

In order to examine the generality of ambiguity tolerance across content domain, a wide variety of authority figures were employed as scale items. Authorities were used as stimuli since they are central to any system of ideological beliefs. In addition, generalized individual differences in ambivalence toward authorities — which originate in early psychodynamic relations with authority figures — is a basic feature of both authoritarianism and dogmatism (Adorno *et al.*, 1950; Rokeach, 1960). Finally, since authority and identity are "mutually implicated" (Robertson

**Figure 4.1. Instructions and format of the Attitudinal Ambiguity Tolerance scale.**

Please circle the appropriate figures. Give your immediate reaction. The best answer is your personal opinion.

## The American Government

Not at all

0 1 2 3 4 5 6 7 8 9 (10)

Very much

Not at all

0 1 2 3 4 5 6 7 8 9 (10)

Very much

### Prime minister John Major

Not at all

0 1 2 3 4 5 6 7 8 9 (10)

Very much

Not at all

① 1 2 3 4 5 6 7 8 9 10

Very much

In addition to its construct validity as a measure of tolerance/intolerance of ambiguity, the unipolar scaling procedure also satisfies the conflicting requirements to weld style to content, and to ensure that the measure of style is not confounded by ideological belief content. In contrast to the Budner scale, the AAT scale does not measure a reified internal cognitive trait indirectly by eliciting a number of opinions which are theorized to reflect the trait. Instead, the scale measures evaluative performance, independently of content. On the other hand, the unipolar scaling procedure can estimate the style with which a number of different social objects are

evaluated. Therefore, style can be associated with particular objects, and cross-content variability in intolerance of ambiguity may be assessed. Moreover, since the same task (evaluative categorization) is employed to assess cognitive style across diverse contents, in contrast to earlier performance measures (e.g., Azzageddi test, Rorschach, autokinetic illusion, etc.), the AAT scale avoids the problems associated with correlating different "task-specific" measures of performance (Kenny & Ginsberg, 1958; Millon, 1957). Also, the AAT scale does not use adjectival contents to assess ambivalence. Unlike Scott's measure of object ambivalence, therefore, it does not necessitate a translation in meaning between the experimenter and subject.

Researchers have generally scored ambivalence on the unipolar scaling procedure by variants of the same formula (see Kaplan, 1972; Laponce, 1978; Moore, 1973, 1980):

$$\begin{aligned} \text{AMB} &= (H + L) - (H - L) \\ \text{where: } H &= \text{the higher of the two scores} \\ L &= \text{the lower of the two scores} \end{aligned}$$

However,

$$\begin{aligned} \text{If} & \quad \text{AMB} = (H + L) - (H - L) \\ \text{then} & \quad \text{AMB} = H + L - H + L \\ \text{therefore} & \quad \text{AMB} = 2(L) \end{aligned}$$

Kaplan's formula thus destroys the logic of the unipolar scaling technique since it employs the information from only one of the two unipolar scales (the lowest score) to estimate ambivalence!<sup>6</sup> The formula employed to estimate ambivalence in the present research is the same as that used by Scott (1966, 1969; Scott *et al.*, 1979) to score his measure of object ambivalence:

$$\text{AMB} = \frac{2L + 1}{L + H + 2}$$

This formula is appropriate since it includes estimates of the degree of contradiction plus the degree of total affect present in evaluation. Scores become large (ambivalent) to the extent to which subjects give similar responses to both the positive and negative unipolar scales, and to the extent to which the maximum degree of liking or disliking are approached. If the two rating scales were of infinite length, the ambivalence index would have an upper limit of one and lower limit of zero. In the following studies, two 11-point unipolar scales are used to assess ambivalence. As such, the scores range from an upper limit of 0.95 (ambivalent) to a lower limit of 0.08 (unambivalent). The lower limit is approached when L is zero and H becomes large, and the upper limit is approached when  $L = H$ , and both become large (see Table 4.1).

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<sup>6</sup> I am indebted to Colin Tredoux for pointing out this obvious, but elusive fact.

Table 1: Schedule for scoring Attitudinal Ambiguity Tolerance by the Scott formula

Higher score	Lower score										
	0	1	2	3	4	5	6	7	8	9	10
0	.50										
1	.33	.75									
2	.25	.60	.83								
3	.20	.50	.71	.88							
4	.17	.43	.63	.78	.90						
5	.14	.38	.56	.70	.82	.92					
6	.13	.33	.50	.64	.75	.85	.93				
7	.11	.30	.45	.58	.69	.79	.87	.94			
8	.10	.27	.42	.54	.64	.73	.81	.88	.94		
9	.09	.25	.38	.50	.60	.69	.76	.83	.89	.95	
10	.08	.23	.36	.47	.56	.65	.72	.79	.85	.90	.95

The Attitudinal Ambiguity Tolerance scale provides a useful tool for assessing intolerance of ambiguity. Besides its construct validity as a measure of tolerance/intolerance of ambiguity as described by Frenkel-Brunswik and Billig, the scale does not embody the common assumption that cognitive style is a generalized individual trait. Of course, this does not mean that the measure makes no substantial assumptions regarding the nature of cognitive style. For one, it generates numerical data on the basis of acknowledged ambivalence, and thus assumes that ambiguity tolerance is manifest consciously and can be measured as a interval variable. This is incompatible, for example, with Freud’s (1927) definition of ambivalence as an unconscious feeling resulting from insufficient fusion of the life and death instincts. At the psychodynamic level, ambivalence may be unquantifiable and not manifest as expressed conflicting evaluations (quite the opposite, see Frenkel-Brunswik, 1949). However, for present purposes, this does not matter. The scale is useful here for it allows us to examine different manifest patterns of cognitive style which are offered/implied by empiricism and critical realism. It allows us to investigate the individualistic assumptions which have hindered attempts to establish an anti-universalistic theory of cognitive style.

## Study 1

Study 1 investigated the generality of ambiguity tolerance across different contents by employing the unipolar rating scale as a measure of tolerance of attitudinal ambiguity. As this measure has been modified and newly developed as a measure of ambiguity tolerance, a first task was to investigate the validity and reliability of the AAT scale. In addition, the study aimed to compare this measure of ambiguity tolerance with the Budner scale in order to determine whether the popular Budner scale is associated with performance reflecting Frenkel-Brunswik's original description of intolerance of ambiguity.

## Method

### Sample and procedures

The sample consisted of 244 first year psychology students who were registered at the University of Cape Town during 1993, and who completed both questionnaires upon which the study was based.<sup>7</sup> It was comprised of 46 Black, 151 White, and 47 Coloured subjects.<sup>8</sup> Sixty two subjects were male and 182 were female. The mean age of the sample was approximately 19.3 years. While some variation was evident in the home language of the Black sample — who spoke a range of African languages — the White sample was English-speaking, and the Coloured sample was predominantly English-speaking.

In order to establish the test-retest reliability of the AAT scale, two separate questionnaires were completed by the same sample (see Appendix B and C). Since the AAT scale included a large number of diverse items, it was unlikely that on the second administration, the subjects could have had remembered their earlier responses, and the influence of carry-over effects was expected to be minimal (cf. Nunnally, 1978). To further reduce the influence of carry-over effects, a 10 week interval separated the administration of the two questionnaires.

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<sup>7</sup> The first questionnaire was completed by 464 subjects, and the second was completed by 279 subjects (35 of whom had not completed questionnaire 1). While the loss of subjects was disturbing, it appears to have resulted from a drop in lecture attendance associated with students "shopping" for courses during the first two weeks of semester (as faculty allows). The subject loss would thus not be systematically related to any of the variables under investigation. The descriptive statistics for the measures included in the first questionnaire are based on the full sample size.

<sup>8</sup> It is recognized that the classification by population group Black, Coloured, and White was designated by the Population Registration Act of 1950 (now defunct). The use of these terms does not imply acceptance of racial classification or discrimination.

The subjects were asked to provide their names so that their two questionnaires could be matched. They were thus not anonymous, but were assured of the strictest confidentiality both verbally and in a covering paragraph to each questionnaire.<sup>9</sup> The questionnaires were completed voluntarily during formal lecturing time. The subjects were informed that the questionnaires included questions regarding a number of personal and social beliefs and opinions, and they were asked not to discuss the questions with their friends. It required between 30 and 45 minutes to complete each questionnaire. The researcher was present throughout both studies, and the procedures were standardized.

## Measures

The questionnaires were comprised of a number of socio-demographic items as well as psychometric scales measuring various constructs of tolerance of ambiguity, ideological beliefs, and ideological commitment.<sup>10</sup>

### Socio-demographic variables

The following socio-demographic variables were employed for descriptive and explanatory purposes (see Appendix B, Section 2):

1. Political party preference (coded as National Party, African National Congress, Afrikaanse Weerstand Beweging, Inkatha Freedom Party, South African Communist Party, Democratic Party, Azanian Peoples Organization, Conservative Party, Pan African Congress). Respondents indicated the party they would "most likely" support and the party they would "least likely" support.
2. Self-ranked liberalism-conservatism (coded on a 7-point scale from very liberal [1] to very conservative [7]).
3. "Population group" (coded as Black, White, Coloured, Indian, Asian, Other).
4. Age (in years).
5. Sex.
6. Home language (coded as Afrikaans, English, South Sotho, North Sotho, Tswana, Swazi, Ndebele, Xhosa, Zulu, Tsonga, Venda, Oriental, and Other).

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<sup>9</sup> The covering paragraph assured the subjects that nobody but the researcher would see their answers.

<sup>10</sup> The data derived from both questionnaires was used in Study 1 as well as Study 2 (which is reported in the next chapter). Only the measures which are relevant to the present study are discussed here.

## **Tolerance of ambiguity**

Tolerance of ambiguity was the central construct of the study and was assessed by four different measures: 1) the Attitudinal Ambiguity Tolerance scale, 2) the Ambivalence scale, 3) the Budner (1962) scale, and 4) the Ideological Orthodoxy scale.

### *Attitudinal Ambiguity Tolerance scale (AAT)*

The Attitudinal Ambiguity Tolerance scale included 45 items (authorities) which were each rated on the two unipolar scales (see Appendix B, Section 4, and Appendix C, Section 2). The authorities were selected by a search of the literature, social psychological theory, and a free association type study.<sup>11</sup> Of particular importance were the inclusion of political, religious, and familial authorities. Due to the exploratory nature of the study, an effort was made to include as wide an ideological range of authorities as possible. An initial list of 112 items was reduced to 45 by classifying each authority into one of seven categories — political party (local), political institution (local), political (international), religious, educational, economic, professional, familial — and then selecting the most familiar of each category.

### *Ambivalence scale*

The Ambivalence scale was developed as a means of estimating the measurement validity of the AAT scaling procedure. This scale included eight items drawn from the AAT scale, but which were presented in the format of Scott's measure of object ambivalence (see Appendix C, Section 5). The scale was employed as an independent measure of tolerance of attitudinal ambiguity. The items were chosen so as to reflect different dimensions of authority underlying the AAT scale. Instead of employing the two unipolar scales, the Ambivalence scale required respondents to select as many adjectives, from a list of 20, which described each authority. Ten positive and 10 negative adjectives were included in the list.<sup>12</sup> An original list of 10 pairs of antonyms were selected from the semantic differential scale (Osgood, Suci & Tannenbaum, 1957). The negative adjectives of many of the couplets included the prefixed version of the positive item (e.g. truthful-untruthful). This was deemed unsuitable as it may have elicited rational and non-contradictory responses from self-presentational motives. Roget's Thesaurus was used to generate

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<sup>11</sup> Subjects ( $N = 23$ ) in third year psychology tutorials were given a blank sheet of paper and were asked to record as many associations they had for the concepts, "authority" and "leader".

<sup>12</sup> This scale shares the same problems as Scott's measure of object ambivalence. It prespecifies adjectives and must assume that all individuals attribute similar meanings to these words, and that the meaning is similar across different attitude "objects".



adjectives of similar meaning to those originally selected, but which did not form clearly antithetical couplets. The scale was scored as per Scott *et al.* (1979) — i.e., in a similar manner to the AAT scale (high scores indicate tolerance of ambiguity).

### *Budner scale*

Budner's (1962) 16-item scale was used as a personality measure of tolerance of ambiguity (see Appendix C, Section 3, items 11-26). The scale was scored by means of a 9-point Likert-type format, with poles marked *very strongly disagree* and *very strongly agree*. High scores on the Budner scale indicate tolerance of ambiguity.

### *Ideological Orthodoxy scale (IO)*

The Ideological Orthodoxy scale was used as a measure of tolerance/intolerance of ambiguity regarding attitudinal diversity across society (see Appendix B, Section 6). It operationalizes intolerance of social attitudinal ambiguity — an interpersonal construct — by assessing intolerance of individuals who hold ideological beliefs which differ from one's own. The scale was included in order to ascertain whether ambiguity tolerance is generalized from personal expressions to social expressions.

The IO scale consisted of 13 items which elicited responses in one of four categories: (a) I believe it and all South Africans must believe it, (b) I believe it but other South Africans need not believe it, (c) I don't believe it but other South Africans can believe it, (d) I don't believe it and other South Africans must not believe it. Following Deonchy (1980, 1984), who developed this scaling procedure, responses (a) and (d) are considered "extreme", while (b) and (c) are considered "liberal". Extreme responses demand uniformity in social attitudes, and may thus be considered expressions of intolerance of attitudinal diversity, a characteristic of the anti-democratic tendency of opinionation (Rokeach, 1956a, 1960). Responses (a) and (d) were scored 0, and (b) and (c) were scored 1. As such, the scale has a potential range from 0 (intolerance) to 13 (tolerance). The items were selected to reflect different contemporary political views regarding order and disorder within South African society. The order-disorder dimension was employed as it has been associated with conservatism (Wilson, 1973), the desire for certainty in the face of social change, and with modern antidemocratic behaviour (Baumann, 1991; Fromm, 1941). Consequently, the items reflected a loosely defined liberalism-conservatism dimension. The scale included both conservative and liberal beliefs to control for response acquiescence.

## Results

### Factor analysis and reliability

As the interpretation of results derived from multidimensional scales is hazardous, and since the alpha coefficient for multidimensional scales may lead to an underestimation of average item intercorrelations within dimensions (Cortina, 1993), the scales were factor analyzed (to assess dimensionality) before internal consistency was estimated. Factor analyses were computed for the full sample to ensure the comparability of factor scores across the population groups.

#### Attitudinal Ambiguity Tolerance scale

Many subjects experienced difficulties with, and did not respond to nine items on the first administration of the AAT scale. These items were excluded from the second questionnaire. The scale was reduced to 32 items by removing a further four items due to their low test-retest correlations. The data for the second administration of the AAT scale were used in analysis as the other measures were completed on this occasion (mainly [stable] demographic data were included in the first questionnaire).

The factor analysis of the AAT scale was exploratory as the measure was newly developed, and the purpose of the study was to ascertain whether the scale "hung together" in a unidimensional manner suggestive of personality functioning. The intercorrelations between the 32 items of the AAT scale were factor analyzed using the principal factor method, with  $R^2$ s in the diagonals as communality estimates (Harman, 1976). This preliminary factor analysis yielded 10 factors with eigenvalues greater than unity. No single factor was dominant, indicating that no general factor of ambiguity tolerance was reflected in responses to the scale.

The factor structure was then rotated using the Harris-Kaiser *orthoblique* transformation (Harris & Kaiser, 1964). This method is appropriate for exploratory factor analysis as it obviates the necessity to state beforehand, whether factors are orthogonal or oblique; orthoblique rotation "has the property, apparently, of transforming the axes, always, in the right direction — the best simple structure can always be seen" (Kaiser, 1970, p. 409). The rotated 10-factor structure distinguished very clearly between different types of authority. For example, the police and the army constituted a single factor, and christian religious authority was distinguished from non-christian religious authority. This structure was, however, unsuitable for further analysis as it was

unparsimonious, and missing values for some items substantially reduced the sample size.<sup>13</sup> In accordance with the exploratory nature of the investigation, the AAT scale was improved by eliminating items which included many missing values, and those with communality estimates less than .30.

By this procedure, a final 20 item scale was derived, and submitted to a principal factor factor analysis. The scree test indicated that four factors should be extracted from the scale (Cattell, 1966). These factors explained 43.9% of the shared item variance. The factor structure was then rotated by the Harris-Kaiser method. Once again, the factor analysis clearly distinguished different domains of authority on the basis of ambiguity tolerance scores, and the final factor structure was readily interpretable. The factors were named tolerance of attitudinal ambiguity toward (1) conservative political authority (AAT-cPol), (2) political authority (AAT-Pol), (3) familial authority (AAT-Fam), and (4) religious authority (AAT-Rel) (see Table 4.2). The weighted factor scores were computed and used as indices of ambiguity tolerance towards the respective domains of authority. The unweighted sum of all 20 items was named AAT-Total.

The test-retest reliability coefficient for the summed AAT scale was acceptable,  $r_{tt} = .66$ ,  $p < .0001$ ,  $N = 237$ , given that the relatively long period between the two questionnaires could have allowed real change in attitudinal ambiguity tolerance. This is probable in the vacillating political climate in South Africa at the time.<sup>14</sup> Cronbach's alpha coefficient for the total scale was adequate ( $\alpha = .81$ ).

In order to ascertain whether responses to the AAT scale were influenced by response style — including either acquiescent response set or the desire to appear rational and non-contradictory — the *like/respect* score for each item was correlated with the *dislike/disrespect* score. This allowed a test of whether responses to the one unipolar scale were dependent on responses to the other, as would be the case if either there was a tendency to respond "very much" or "not at all" to all the items, or to respond in a consistently non-contradictory manner. The correlations for each item varied from -.08 to -.73, with a mean correlation of -.45. This suggested that high scores on the one unipolar scale tended to be associated with low scores on the other. These findings reflect both the desire to appear rational, and the manner in which attitudes are held.

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<sup>13</sup> The main reason for the missing values was that many students did not understand the meaning of some of the items (e.g., the Talmud, the Koran, Umkontho we Sizwe, and the Organization of African Unity).

<sup>14</sup> The secretary general of the South African Communist party, Mr Chris Hani, was assassinated approximately four weeks before the second questionnaire was completed. This resulted in widespread political unrest in the country.

However, since the response bias derived from a desire to appear rational should be constant across all items, and since the magnitude of the correlations varied substantially across the items, it appears as though these correlations reflect the manner in which attitudes are held, rather than response bias. This conclusion is supported by the fact that for almost every item, the full potential range of ambiguity scores was obtained. It thus appears as though neither acquiescent response set nor rational self-presentation played a major role in the findings.

**Table 4.2:** Factor structure for Tolerance of Attitudinal Ambiguity scale (N=194).

Items	Factors				Communality
	Conservative political	Political	Familial	Religious	
Afrikaner Weerstand Beweging	.779				.620
Eugene Terreblance	.761				.582
The Conservative Party	.725				.575
The SA Government	.387	.448			.315
The Inkatha Freedom Party	.304	.584			.361
The African National Congress		.753	.399		.594
Nelson Mandela		.751	.307		.565
Bishop Desmond Tutu		.632			.401
Parents		.399	.717		.535
The family		.417	.667		.474
Your own values			.649		.440
Friends			.618		.397
Personal conscience			.597		.362
Doctors			.544		.300
Your culture			.494	.353	.306
The bible				.821	.682
Jesus Christ				.782	.625
God			.305	.758	.579
Your church				.580	.355
The pope		.313		.502	.329
$\Sigma(\text{loadings})^2$	2.134	3.075	3.320	2.933	

Note. To facilitate interpretation, only weights greater than or equal to .30 are reported.

Concurrent validity of the AAT scale was examined by correlating the Ambivalence scale with a subscale of AAT comprised of the same eight items as the Ambivalence scale. A subscale, rather than the full AAT scale, was used to ensure that the two measures assessed ambiguity tolerance toward similar contents. Given the difference between the two measurement procedures, and the methodological problems associated with the Ambivalence scale (discussed earlier), the correlation coefficient,  $r = .36$ ,  $p < .0001$ ,  $N = 233$ , was considered a satisfactory indication of validity. This suggests that both scales measured expressed attitudinal ambivalence toward the authorities represented in the scales. Although it is possible that subjects' responses to the Ambivalence scale were influenced by their responses to the AAT scale, this is unlikely since the AAT scale included many diverse items, and the two scales were separated by other measures. Furthermore, it appeared as though the subjects heeded the request to "complete each page separately without referring to [their] previous answers".

### **Budner scale and Ideological Orthodoxy scale**

In accordance with previous factor analysis of the Budner scale (Sidanius, 1978b), it was submitted to a principal components factor analysis. Six factors were extracted with eigenvalues greater than one. These explained 57.64% of the total variance. Orthogonal and oblique rotations were performed in an effort to achieve simple structure. As this was not attained, the varimax solution was rotated according to the Harris-Kaiser method. The factors were not named as their interpretation was equivocal. Many items loaded on more than one factor, and the items which loaded highest on each factor were heterogeneous. Nonetheless, weighted factor scores were derived and used as indices of tolerance of ambiguity. Cronbach's alpha coefficient for the total scale was low as expected ( $\alpha = .55$ ).

An initial principal factor analysis of the IO scale found it to be unidimensional. The alpha coefficient for the scale was .91.

### **Scale statistics**

The distribution of scores for IO, AAT-cPol, and AAT-Rel were slightly positively skewed. Scores on all other measures were normally distributed. Means, standard deviations, and sample sizes for all indices of ambiguity tolerance were computed separately for each population group (see Table 4.3).

Table 4.3: Univariate statistics for all indices of tolerance of ambiguity<sup>15</sup>

Index	Mean dif <sup>a</sup>	Population group								
		White			Black			Coloured		
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
AAT-Total	$R^2 = .24$	8.78 c	2.27	150	5.30 a	2.59	41	7.48 b	2.32	47
AAT-con. Pol.	$R^2 = .06$	0.16 b	0.94	122	-0.35 a	0.71	34	-0.22 a	0.74	38
AAT-Political	$R^2 = .38$	0.35 c	0.67	122	-1.16 a	0.85	34	-0.08 b	0.76	38
AAT-Familial	$R^2 = .08$	0.15 b	0.89	122	-0.55 a	0.84	34	0.02 b	0.88	38
AAT-Religious		0.15	0.92	122	-0.27	0.97	34	-0.24	0.81	38
Budner	$R^2 = .12$	77.05 b	11.16	151	67.37 a	13.26	43	69.77 a	9.51	46
B1	$R^2 = .05$	0.14 b	0.91	149	-0.49 a	1.25	38	-0.06 b	0.92	46
B2	$R^2 = .13$	0.24 c	0.84	149	-0.73 a	1.25	38	-0.16 b	0.92	46
B3	$R^2 = .04$	0.00 a	0.96	149	0.37 b	1.13	38	-0.29 a	0.92	46
B4		0.05	1.02	149	-0.15	1.11	38	-0.03	0.85	46
B5	$R^2 = .12$	0.24 c	0.90	149	-0.66 a	1.07	38	-0.21 b	0.98	46
B6		0.10	0.97	149	-0.11	1.14	38	-0.22	0.95	46
IO	$R^2 = .02$	10.64 a	3.20	301	10.06	4.15	87	9.39 b	4.07	76

Note. Significant multiple comparisons [Newman-Keuls] arranged from the smallest mean (a) to largest (c) ( $\alpha = .05$ ).

<sup>a</sup>Effect sizes are reported for significant group mean differences ( $\alpha = .05$ ).

Whites were more tolerant of ambiguity than Blacks in all but one instance (B3) where group mean differences reached significance. The difference between the AAT means of the Black, White, and Coloured sample provides further evidence of validity of the AAT scale. As would be expected of these "criterion groups", the Black and Coloured samples were less ambivalent in their evaluation of conservative political, political, and familial authorities than was the White sample. These findings were anticipated in the political domain since politics is fraught with many contradictions for liberal (English-speaking) Whites, who must reconcile material advantage with the inequality of the system. The Black sample, on the other hand, tended to either accept or reject political authorities in an unambivalent manner. The differences in AAT scores toward familial authorities may reflect the difference between traditional and permissive family structures of Blacks and liberal Whites respectively. The findings are thus readily interpretable by considering the material and ideological meanings that the different authorities have for the

<sup>15</sup> The variation in sample size across the different indices is attributable to the different sample sizes which completed the first and second questionnaire, as well as the factor analysis which rejects subjects with any missing data. The sample sizes reported here are relevant to all further analysis. Correlation analyses are based on the sample size of the index with the smallest sample.

different population groups. However, they are equally explicable in terms of personality differences since the group differences across the Budner scale largely mirrored those across the AAT scale.

### Correlational analysis

The multidimensional nature of the AAT scale has already suggested that tolerance/intolerance of ambiguity is not a generalized personality trait. The precision with which the factor analysis distinguished between ambiguity tolerance toward different domains of authority suggests that expressions of ambiguity tolerance are content dependent. The investigation is extended here to incorporate an analysis of the intercorrelations between all the indices of ambiguity tolerance. This will clarify the nature of the relationships between the AAT scale, the Budner scale, and the IO scale, as well as demonstrate whether the scale factors are orthogonal or oblique.

Since heterogenous samples may yield attenuated correlation matrices (Howell, 1991), and thus bias results toward orthogonal associations (i.e., against the predictions of the trait thesis), correlation matrices for the indices of ambiguity tolerance were computed separately for the White, Black, and Coloured samples (see Tables 4.4a, 4.4b, 4.4c). Overall the correlation matrices are remarkably similar: the significant correlations are concentrated among the factors of the AAT scale, while the Budner factors are unrelated to each other, and to the AAT factors.<sup>16</sup>

**Table 4.4a:** Correlations between indices of tolerance of ambiguity (White sample)

	AAT-cPol	AAT-Pol	AAT-Fam	AAT-Rel	Budner	B1	B2	B3	B4	B5	B6	IO
AAT-Tot.	.27**	.68***	.70***	.60***	.21*	.05	.04	-.07	.17	.15	.14	.09
AAT-Con. Pol.		.25**	-.23*	-.14	-.34***	-.34***	-.28*	-.17	-.12	-.09	-.11	.13
AAT-Political			.43***	.00	.03	-.08	-.03	-.05	.16	-.02	.08	.13
AAT-Familial				.30**	.40	.30**	.18	-.01	.29*	.25*	.19	.06
AAT-Religious					.16	.23	-.02	-.20	.16	.12	.17	.09
Budner						.45***	.59***	.31	.59***	.50***	.43***	.02
B1							.19	.06	.08	.04	-.16	-.06
B2								.18	.16	.07	.15	-.08
B3									.05	-.05	.00	-.13
B4										.17	.22*	.07
B5											.14	.07
B6												.06

\* $p < .01$ . \*\* $p < .001$ . \*\*\* $p < .0001$ .

<sup>16</sup> At the risk of increasing the type II error rate, the significance level for the White sample was set at  $\alpha = .01$  as a protection against increased familywise error rate arising from the large number of inferential tests. The Black and Coloured samples were too small for similar precautionary measures.

**Table 4.4b:** Correlations between indices of tolerance of ambiguity (Black sample)

	AAT-cPol	AAT-Pol	AAT-Fam	AAT-Rel	Budner	B1	B2	B3	B4	B5	B6	IO
AAT-Tot.	.44***	.82***	.85***	.68***	.14	-.13	.36*	-.17	-.05	.15	-.07	.12
AAT-Con. Pol.		.46**	.20	-.13	.12	-.17	.31	-.08	-.12	.13	-.13	.18
AAT-Political			.59***	.29	.14	-.28	.47**	.08	-.15	.22	-.14	.15
AAT-Familial				.58*	.03	-.25	.22	.09	-.06	.05	-.02	.19
AAT-Religious					.07	-.29	-.04	.30	.00	.05	.21	-.05
Budner						.25	.50**	.53**	.18	.74**	.12	.14
B1							-.06	.32*	-.23	-.17	-.22	-.18
B2								.17	-.19	.36*	-.33*	.15
B3									-.13	.15	-.07	-.15
B4										.15	.02	.16
B5											.15	.05
B6												.07

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .**Table 4.4c:** Correlations between indices of tolerance of ambiguity (Coloured sample)

	AAT-cPol	AAT-Pol	AAT-Fam	AAT-Rel	Budner	B1	B2	B3	B4	B5	B6	IO
AAT-Tot.	.14	.68***	.71***	.61***	.18	.27	.07	-.14	-.11	.23	-.18	.36*
AAT-Con. Pol.		.32*	-.26	-.38*	-.47**	-.27	-.38*	-.08	-.09	-.09	-.14	.16
AAT-Political			.17	.06	-.11	-.03	-.15	-.01	-.02	.09	-.32*	.55***
AAT-Familial				.48**	.32	.34*	.09	-.11	-.03	.04	.16	.25
AAT-Religious					.52***	.41**	.26	-.08	-.09	.39*	.15	.07
Budner						.73***	.54***	-.07	.30*	.62***	.17	-.05
B1							.51***	-.16	-.08	.39**	-.10	.09
B2								-.12	-.03	-.01	-.20	-.10
B3									.07	-.24	-.01	-.24
B4										.12	-.10	-.17
B5											.16	.12
B6												.08

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

The upper left hand area of the tables shows the intercorrelations among the factors of the AAT scale. The significant correlations between AAT-total and its factors were expected on mathematical grounds since the AAT scale is a composite of its factors (cf. Mulaik, 1972). The intercorrelations between the factors of the AAT scale do not reflect a generalized personality trait of ambiguity tolerance. On the contrary, the mixed pattern of positive, negative, and orthogonal associations suggests a marked degree of individual variability in tolerance of ambiguity across different cognitive contents. While AAT-cPol and AAT-Pol were significantly correlated, in all cases bar one (between AAT-cPol and AAT-Rel for the Coloured sample), ambiguity tolerance toward political and conservative political authorities was unrelated to ambiguity tolerance of religious authorities. In contrast, the indices of ambiguity tolerance toward familial and religious authorities were significantly correlated for all three samples, and AAT-Fam was associated with AAT-Pol for the Black and White samples. Possibly the most outstanding findings were the significant negative associations between AAT-cPol and AAT-Fam for the White sample and AAT-cPol and AAT-Rel for the Coloured sample. These results directly contradict the trait thesis since they suggest that for the same person, high levels of



ambiguity tolerance within one content domain may be associated with low levels in another.

In addition to the consistent pattern of associations across all three samples, conspicuous differences were also evident between the samples. These differences suggest cross-cultural influences on the ambiguity tolerance that members of different groups have toward different domains of authority. The negative correlations between AAT-cPol and other indices for the White and Coloured samples, but not for the Black sample, are particularly telling. These results suggest that, directly contrary to the predictions of Adorno *et al.* (1950), authoritarian styles of evaluating familial and religious authorities were associated with ambivalence in evaluating conservative political authorities. These findings are, however, explicable if one takes the ambivalent relation (within the liberal context of UCT) that conservative Whites and Coloureds (but not Blacks) have toward conservative politics. While conservative Blacks reject racist authorities outright, conservative Whites and Coloureds may equivocate between rejecting racism and maintaining advantage (i.e., ingroup status, and economic and political privilege etc.).

With these findings in mind, it is no wonder that the correlations between the factors of the AAT scale and the Budner scale are puzzling: whereas the Budner scale was developed to measure a generalized trait of ambiguity tolerance, the results for the AAT scale have shown ambiguity tolerance to be content specific. Accordingly, the cluster of non-significant associations between the two measures is not surprising — they question whether the two scales measure the same construct. Although the correlation of .21 between the Budner scale and the total AAT scale for the White sample suggests that both scales may tap a personality dimension of ambiguity tolerance, only the familial and conservative political factors of the AAT scale were related to this personality factor. Moreover, for the Black and Coloured samples, these scales were not significantly correlated. Besides the overwhelming pattern of non-significant associations, the matrices have three noteworthy characteristics which question the validity of the trait thesis. First, there is no consistent pattern regarding which AAT factors are associated with the different Budner factors. Second, the different pattern of associations across the three samples suggest that one should be wary of cross-cultural work with the Budner scale. Finally, the negative correlations between AAT-cPol and the Budner scale for the White and Coloured sample indicate that the Budner scale may yield wholly inaccurate predictions of ambiguity tolerance within particular content domains.

Nonetheless, these correlations are theoretically interesting. Since the AAT scale does not measure ambiguity tolerance with reference to ideological beliefs, the associations are not the result of shared content of the scales. In response to Ward's (1988) question regarding what the

Budner scale measures, the findings suggest that different parts of the Budner scale: 1) measure different things, 2) measure different things for different samples, and 3) within certain content domains, the Budner scale may measure the precise opposite of what it is supposed to measure. If the Budner scale does tap a personality dimension of ambiguity tolerance, then it appears as though, within a particular context, this dimension is relevant only to the evaluation of certain contents. Parts of the Budner scale may tap the intolerance of ambiguity toward familial authorities, which is central to the theory of authoritarianism. However, in contrast to earlier theorizing (Adorno *et al.*, 1950; Frenkel-Brunswik, 1949, 1951, 1954), this does not appear to generalize to intolerance of ambiguity toward all authority — let alone asocial "objects". On the contrary, conservative individuals within this liberal context who demonstrated an unambivalent evaluation of familial authority tended to evaluate conservative political authorities in an ambivalent manner. These findings question the validity of the Budner scale as well as the trait thesis.

Perhaps the most surprising findings of all was the orthogonality between different factors of the Budner scale. Since this scale was developed as a measure of a generalized personality trait, and has typically been employed as a unidimensional summed score, one would expect the different factors to be strongly intercorrelated. However, despite the expected associations between a composite variable and its parts (Mulaik, 1972), some Budner factors did not even correlate with the summed Budner scale. Even though parts of the Budner scale were weakly associated with certain AAT factors, the different Budner factors were not intercorrelated. Thus, while the validity of the Budner scale remains vague as Ward (1988) observes, it is clear that, if employed as a unidimensional measure, the Budner scale is an inaccurate predictor of ambiguity tolerance within specific content domains.

Finally, the non-significant associations between the IO scale, and the AAT scale and Budner scale also question the validity of the trait thesis. These suggest that personal expressions of ambiguity tolerance are not generalized to a tolerance of ideological difference within society, as Rokeach's theory of opinionation argues. This finding questions Ward's (1988) proposal that the Budner scale is related to the need for uniformity. The significant correlations between IO and AAT-Total and AAT-Pol for the Coloured sample indicate cross-cultural variability in the association between personal and social expressions of ambiguity tolerance, and imply that it is not personality, but other factors (about which I will not speculate here), which underlie these relationships.

In sum, the findings suggest that expressions of ambiguity tolerance are content specific. Knowledge of an individual's tolerance of ambiguity in one domain cannot be generalized to other domains, or to the need for social uniformity. These findings question the utility of personality measures of ambiguity tolerance such as the Budner scale. In the present study, for example, Budner scores were related to attitudinal ambiguity tolerance both positively and negatively, and non-significantly.

A secondary factor analysis (Cattell, 1978, chap. 9) was undertaken for the White sample in order to summarize the intercorrelation matrix, and to corroborate the conclusions of multidimensionality.<sup>17</sup> The 13 indices of ambiguity tolerance were submitted to a principal components factor analysis. By the criterion of eigenvalues greater than one, four factors were extracted which accounted for 62.08% of the total variance. In the light of the observed independence between many of the indices, the factors were rotated orthogonally by the varimax transformation. The final factor structure separated the AAT scale from the Budner scale, and divided the indices of each of these scales into two further dimensions (see Table 4.5). Attitudinal ambiguity tolerance toward political authorities was separated from ambiguity tolerance toward other authorities, and Budner factors 1, 2 & 3 were distinguished from the other Budner indices.<sup>18</sup> Ideological Orthodoxy loaded moderately onto the ambivalence toward political authority factor.

Overall, the correlation matrix and the secondary factor structure do not present a picture of a generalized trait of tolerance of ambiguity. While it is certain that this is partially due to measurement error associated with the poor validity of the Budner scale, this cannot account for the independence between different factors of the AAT scale and between the AAT scale and Ideological Orthodoxy. The results suggest that expressions of tolerance of attitudinal ambiguity are closely tied to particular contents. Most importantly, ambivalence toward political authority was clearly distinguishable from ambivalence toward other authorities. In addition to the influence of content, personal expressions of tolerance of ambiguity were not related to social tolerance in an isomorphic manner.

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<sup>17</sup> Only the White sample large enough to warrant a secondary factor analysis.

<sup>18</sup> I once again attempted to interpret the Budner scale by examining the secondary factors. No unambiguous interpretation was possible.

**Table 4.5:** Secondary factor structure for Tolerance of Ambiguity (White sample,  $N = 122$ ).

Index	Secondary Factors				Communality
	Ambivalence	Political Ambivalence	B1, B2 & B3	B4, B5 & B6	
AAT-Tot	.745	.600			.956
AAT-cPol		.794			.703
AAT-Pol	.363	.753			.766
AAT-Fam	.730				.687
AAT-Rel	.800				.700
Budner			.718	.651	.965
B1	.389	-.318	.572		.599
B2			.785		.629
B3	-.329		.341		.287
B4				.640	.421
B5			.358	.583	.549
B6				.726	.582
IO		.487			.250
$\Sigma(\text{loadings})^2$	2.210	2.026	1.936	1.871	

Note. Only weights greater than .30 are reported.

## Discussion

The conflicting findings and resulting loss of interest in studying intolerance of ambiguity has been attributed to invalid and unreliable measures of the construct, which, according to Altemeyer (1981), "deserves some intolerance" (p. 53). I have argued that most of these measurement problems originate in the misinterpretation of Frenkel-Brunswik's definition of intolerance of ambiguity. On the basis of her descriptive research, Frenkel-Brunswik (1948b, 1949, 1951, 1954) defined intolerance of ambiguity as an evaluative construct, rooted in psychodynamic emotional ambivalence, and manifest as an "attitudinal variable" reflecting an unambivalent evaluation of social "objects". In order to test the generality of the construct as a personality trait, Frenkel-Brunswik proceeded in a deductive manner: she designed asocial and non-evaluative measures of intolerance of ambiguity and tested whether these were associated with the original construct. These latter asocial and non-evaluative measures have, however, typically been employed as the operational definitions of intolerance of ambiguity. In contrast to Frenkel-Brunswik, therefore, researchers have assumed intolerance of ambiguity to be a generalized personality trait which influences individual performance at a variety of tasks, and which is reflected in the cognition

of a diversity of "objects". These measures have thus reified intolerance of ambiguity as a formal and pervasive property of individual psychology.

With growing interest in the relationship between cognitive style and ideological beliefs (e.g., Sidanius, 1985; Stone *et al.*, 1993; Tetlock, 1983a), it has become increasingly important to design measures of intolerance of ambiguity which are free from the above assumptions. In this chapter, Kaplan's (1972) unipolar scaling procedure has been modified and proposed as a valid measure of tolerance of attitudinal ambiguity. The AAT scale has the advantage of not assuming tolerance of ambiguity to be a generalized personality trait, and can test for cross-content variability in ambiguity tolerance. In addition, it assesses the central evaluative aspects of ambiguity tolerance. Accordingly, The AAT scale does not reify intolerance of ambiguity, but measures evaluative performance across different social "objects" in a direct and non-reductive manner.

In Study 1, the AAT scale was found to be a valid and reliable measure. Both the test-retest and internal consistency statistics were of sufficient magnitude to consider the scale reliable. Validity criteria were derived from two sources. The scale was found to correlate significantly with an independent measure of ambivalence; and it distinguished, in a predictable manner, between the levels of ambiguity tolerance which the Black, White, and Coloured samples expressed toward political and familial authorities.

The results provide strong grounds for rejecting the theory of a general trait of intolerance of ambiguity. They showed expressions of tolerance of attitudinal ambiguity to vary considerably across content and culture. The factor structure of the AAT scale made clear and unambiguous distinctions between ambiguity tolerance toward different domains of authority. Rather than being unidimensional, the factors of the scale were associated with each other positively, negatively, and non-significantly. These findings suggest that, within a single individual, high levels of ambiguity tolerance within one content domain may be associated with low levels in another domain, and may be unrelated to ambiguity tolerance in a third. In addition, the pattern of relationships varied across the three different samples, indicating that social factors, rather than universal personality dynamics, may underlie the associations between different domains of ambiguity tolerance.

By questioning trait theory, serious doubts are raised concerning the validity of personality measures of intolerance of ambiguity. Measures such as the Budner scale have typically assumed intolerance of ambiguity to be a general trait and have reified the construct as such by

apportioning each subject a single score to represent their cognitive style (Furnham, 1994; Scott *et al.*, 1979). The orthogonal multidimensional factor structure of the Budner scale questions whether intolerance of ambiguity can be regarded as a pervasive personality dimension. More seriously, the intercorrelations between the Budner scale and AAT scale suggest that the Budner scale may be completely inaccurate in predicting ambiguity tolerance within particular content domains.

The findings raise some important theoretical issues. By challenging trait theory, the results raise questions concerning the underlying reasons for the correlations between ambiguity tolerance toward different contents, and between ambiguity tolerance and ideological beliefs. An alternative to theorizing these associations in terms of a generalized personality trait is required. The present results can give no definitive theoretical alternatives. On the one hand, the correlation between the total AAT scale and the Budner (for the White sample) suggests that a personality factor may influence the manner in which individuals evaluate authority figures in general, while the evaluation of specific authorities may be influenced by other factors.

However, this interactionist partition of ambiguity tolerance into general personality traits and other factors is inadequate. The pattern of positive, negative, and orthogonal associations between ambiguity tolerance toward different domains of authority indicates that expressions of ambiguity tolerance are inextricably bound up with cognitive contents. The results suggest, therefore, that we need to consider the meaning of the cognitive contents if we wish to understand the stylistic features of cognition. This, in turn, implies that we are to expect context and culture to play an important role in shaping expressions of ambiguity tolerance (Barwise, 1988; Lakoff, 1988; Markovà & Foppa, 1990). To explain cognitive style we must consider the meaning of the content of cognition for a group within a particular context.

Such an interpretation would recommend, for example, that we do not explain the Black sample's univalent evaluation of political authorities in terms of basic personality differences between Blacks and Whites. Instead, one could argue that, due to the history of apartheid, Blacks have unambivalently rejected the legitimacy and value of the apartheid regime and supported the aligned Black liberation movements. Liberal Whites, however, due to their material and political advantages under the illegitimate regime, are much more ambivalent in their evaluation of political authorities. Such an argument introduces material and ideal, praxis- and concept-dependent structures as the causal powers underlying expressions of cognitive style. Democratic commitment under oppressive regimes such as apartheid South Africa and Nazi Germany, for instance, may be associated with univalent evaluation of political authorities (cf. Fromm, 1984).

Finally, the findings reported here reassert the importance of intolerance of ambiguity as an ideological and psychological construct. It cannot be mere coincidence that ambiguity tolerance scores distinguished so clearly between different dimensions of authority. Like Rutherford's famed surprise at witnessing  $\alpha$  particles rebounding off gold foil in his studies of radioactivity, it was with astonishing accuracy that the factor analysis used ambiguity tolerance scores to identify subtle differences between various domains of authority — it was as if SAS was employing variable names rather than the data to derive factors. These findings support Frenkel-Brunswik's conclusion that intolerance of ambiguity is "one of the basic variables in both the emotional and the cognitive orientation of a person toward life" (Frenkel-Brunswik, 1949, p. 113), and suggest that this may be a fruitful avenue of research. Of course, the underlying reasons for the significant associations between ambiguity tolerance toward different content domains remains an open question.

## Conclusion

The textuality of observation means not only that observation is theory-bound, but implies also that observations are always potentially contentious. In contrast to the present interpretation, for example, to support his personality-based theory of ideological beliefs, Eysenck uses factor structures similar to the ones reported here. Eysenck (1975) had a sample of Londoners complete a questionnaire of 88 attitudinal items, and submitted their responses to factor analysis. Primary factor analysis yielded 10 factors and the secondary factor analysis produced three orthogonal "superfactors". According to Eysenck, the "data speak for themselves" (p. 330). They divulged that Eysenck's (1954) two-factor personality-based theory of sociopolitical attitudes was, with minor modifications, substantially correct.

The analysis of the AAT scale yielded results roughly similar to Eysenck's. Although the scale assesses attitudinal style rather than content, the preliminary factor analysis produced 10 factors and the secondary analysis produced two factors. These data, however, do not speak for themselves, nor do they necessarily imply that two independent dimensions of personality underlie the factor structure. On the contrary, I have rejected personality theory in interpreting the results. In response to the contentious nature of observation, the following discussion argues against a personality-based interpretation of these findings. This is undertaken on two levels. First, the explanation of the findings is contextualized by situating an interpretation of the data within an empiricist and a critical realist framework. Second, the results are used to advance concrete reasons why a critical realist explanation is preferred.

A basic difference between empiricism and critical realism lies at their starting point. Empiricism begins with epistemological questions, and defines ontology, via the epistemic fallacy, in terms of knowledge statements (Bhaskar, 1989b). The knowledge statements which are true for an empiricist science are those based on constant conjunctions of events. This leads empiricist psychology to focus on individual differences, and to offer personality-based explanations of manifest associations between measures of cognitive style (see pp. 22-24). By assuming that empirical factor structures correspond to dimensions of personality, empiricist psychology then ontologizes observed surface phenomenon such as factor structures (i.e., commits the ontic fallacy). Psychologists thus conclude that the individuals across whom the constant conjunctions were observed, are the immediate material cause of these conjunctions. In addition to advancing a theory which can boast predictive power (and so justify its truth value), empiricists offer what at first sight appears to be an complete explanation of cognitive style.

Critical realism, in contrast, is an ontological rather than an epistemological philosophy — it is interested in content above process (cf. Harré, 1981). It begins transcendently, by arguing that certain underlying generative structures must exist for human activity (including science) to be rendered rational and intelligible. Moreover, critical realism tells us something of the nature of the underlying generative structures. Bhaskar (1986, 1989a, 1989b) argues that, for the human sciences, these structures are social-relation-dependent, praxis- and concept-dependent, and manifest a material-space-time specificity and substantial geo-historicity. Under certain conditions (e.g., controlled scientific activity) these structures may produce empirical regularities, but by and large, the regularities are masked by the uncontrolled nature of day-to-day life (Bhaskar, 1975, 1989b; Chalmers, 1988). Critical realism thus acknowledges empirical regularities, but interprets them as surface phenomena which are inherently variable, because their generative structures, being praxis- and concept-dependent (i.e., anti-universalistic), are meaningful and bound to content and context (cf. Barwise, 1988; Lakoff, 1988; Marková & Foppa, 1990). This suggests that cognitive style is not a thing which exists in the individual (i.e., a psychological property). Quite the opposite, on an emergent surface level, cognitive style is expected to be variable across content, context, and cultural group.

Observed factor structures do not, therefore, speak for themselves. The same factor structure will be interpreted very differently by an empiricist and critical realist. While the former sees the empirical regularities as the manifestation of the property of things (in this case personality), the latter interprets these regularities with reference to the work (including controlled measurement and primary and secondary factor analysis) that the scientist must perform to "produce" and render regularities visible. By the ontic fallacy, the snap-shot factor structure leads the empiricist



to conclude that the world is stable and consistent, whereas the critical realist argues that underlying generative structures can be made to yield stable relationships (methodologically/technologically).

The data at hand offer a number of reasons why a critical realist interpretation is more appropriate than an empiricist interpretation in terms of personality. Fundamentally, an individualistic personality theory encounters difficulties in reconciling a theory of stable and general traits with manifest variability in cognitive style. Empirical variability questions the validity of a "thing-like" empiricist ontology.

Firstly, the extensive variability across the different factors of the AAT scale poses major problems for personality theory. How is it possible for personality theory to explain the two secondary factors of the AAT scale? Traditionally, different "superfactors" — as Eysenck reifies them — are explained in terms of different dimensions of personality.<sup>19</sup> Personality theory, however, labours to explain this variability (which inevitably creeps into research findings). Why, for example, would different dimensions of personality be involved in evaluating political and religious authorities, and cause individuals to evaluate political authorities differently from familial and religious authorities? Are there distinct political, religious, and familial dimensions of personality structure? What causes different *dimensions of personality to separate out* so nicely (across ideological contents), and *how do these dimensions of personality recognise different ideological contents*? These are especially troubling questions once one considers that the objects of evaluation in Study 1 were restricted to the very narrow domain of authorities, and that similar value conflicts are involved in evaluating all authorities (cf. Rokeach, 1973). By relying on a correspondence theory of meaning, empiricism leaves the structure of personality and link between personality and ideological contents largely unexplained.

This first difficulty becomes more acute when considering the relationships between the different factors of the AAT scale before they are masked by the secondary factor analysis. Even if cognitive style is not generalized over different domains of authority, but if two or so different superfactors of personality underlie the evaluation of political and other authorities, how can this help to explain the variable pattern of relationships between the different AAT factors? How and why, for example, does personality functioning cause negative relationships between AAT-cPol, and AAT-Fam and AAT-Rel for the White and Coloured samples? This would suggest, not only

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<sup>19</sup> This is a classic example of the ontic fallacy - the ontologization of knowledge - which in combination with Humean causality leads to the ontologization of observation: The observed factor structures become superfactors which in turn become dimensions of personality.

that there are two different dimensions of personality, but that these dimensions are (somehow) negatively related to each other (in psychology).

Finally, all these difficulties become unpleasantly compounded once cross-cultural variability is taken into account. Not only must the personality theorist argue (a) that there are different dimensions of personality (which make very subtle distinctions between different domains of authority), (b) that these different dimensions can cause positive, negative, and orthogonal relationships between ambiguity tolerance toward different domains of authority, but (c) must explain cross-cultural differences in (a) and (b). In sum, variability across content and social group pushes the personality-based account of cognitive style past its self-imposed limits of stability and consistency. The theory must explain cross-content and cross-cultural difference in personality structure, and is thereby plunged into the world of the social. Thus, although empiricist personality theory may generate powerful predictive accounts by assuming an isomorphism between empirical regularities and personality, they leave unanswered a number of ontological questions regarding how personality produces observed outcomes.

A much more obvious — and I think eventually more parsimonious — answer to manifest variability would not involve masking it in secondary "superfactors", but would involve adopting a critical realist ontology. This means changing the focus of research from prediction, based on personality (i.e., the routine function of cognitive traits), to an analysis of the kinds of generative structures which must exist to produce the recorded patterns of manifest associations. A shift in the values guiding theory-building is required. This entails a switch from evaluating theories in terms of their predictive power, to an "exclusively explanatory" science (Bhaskar, 1989a). According to such an approach, personality theory would need to develop detailed explanations of how and why personality structure produces the variable pattern of relationships between the different AAT factors, both within and across different social groups. This is a difficult, if not impossible task, given the definition of personality in terms of generality, stability, and consistency.

The results of Study 1 cannot help to identify generative structures, as an explanatory science would recommend. The study has been designed with a more general aim in mind: to examine the plausibility of two ontologies which are theorized to underlie the expression of ambiguity tolerance. It would thus be inappropriate to speculate here on the content of these underlying structures, but it seems clear that a change from an universalistic empiricist ontology is required to explain the manifest variability in ambiguity tolerance. A critical realist ontology may be useful as it can easily accommodate the observed findings. Since it posits generative structures which

are relational and praxis- and concept-dependent, it anticipates psychological phenomena which are thoroughly social and indexical.

The explanatory usefulness of such a generative ontology can be illustrated by considering the distinction between ambiguity tolerance toward political and religious authorities which was evident in this study. Rather than arguing that different dimensions of personality produced these findings, they could be explained in terms of praxis- and concept-dependent generative structures. This would suggest that it is the meaning that these different authorities have for individuals, rather than some (largely unexplained) feature of individual psychological make-up, which causes them to be evaluated in different ways. This explanatory turn shifts the focus of interest away from the individual's psychological make-up (e.g., dimensions of personality) to the context — a "scientific" study in a psychology lecture at the University of Cape Town — in which the findings were produced.

This would account for the unexpected manner (from personality theory) in which AAT-cPol behaved. Thinking about conservative political authorities within the liberal atmosphere of UCT may invite high levels of value conflict for real praxis- and concept-dependent reasons. While Whites, and to an extent Coloureds, have (and continue to) enjoyed economic, and social advantage (and political power in the Western Cape), the race-based advantages of the apartheid regime are strongly condemned by the liberal institution. Conservative politics is a domain where two highly salient, but antithetical discourses exist from which students may draw. This conflict is especially acute for White students who have been brought up in conservative households. If these students evaluate their parents unambivalently (as would be expected from a conservative upbringing), then the negative association between AAT-cPol and AAT-Fam could be accounted for in terms of underlying praxis- and concept-dependent structures, rather than dimensions of personality.<sup>20</sup>

Such reasoning suggests that there may indeed be a relationship between the content and style of cognition. However, this would not be attributed to some underlying personality dynamic. Rather social factors arising from material interests and institutional "pressures and suggestions" about certain beliefs (e.g., fascist sentiments in the USA during WW2) would underlie these emergent

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<sup>20</sup> In contrast to Tetlock's theory of stylistic cognitive change in contexts of accountability, this account stresses the praxis- and concept-dependence of generative structures. By focusing purely on changes in attitude and cognitive style in contexts of accountability, Tetlock psychologizes the rhetorical encounter, and disregards the material and ideological investments which constrain individuality, attitude and cognitive change, and impression management.

associations. This would suggest cross-context and cross-content variability in relationship between cognitive style and ideological beliefs. This will be explored in the next chapter.

## **Investigating the relationship between tolerance of ambiguity and ideological conservatism**

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This chapter returns to the main concern of the thesis: investigating the relationship between cognitive style and ideological beliefs. After reviewing the social psychological theories of this relationship in Chapter 2, it was concluded that an anti-universalistic account may be a fruitful way of resolving the theoretical ambiguity which has marked this body of literature. This necessitated a detour through Chapters 3 and 4; current measures of cognitive style were evaluated according to their universalistic assumptions, a new measure was proposed, and a prime universalistic assumption — the stability, consistency, and generality of cognitive traits — was scrutinized. It was concluded that tolerance/intolerance of ambiguity does not appear to be a trait-like feature of personality, but that expressions of ambiguity tolerance are inextricably context- and content-dependent. The indexical nature of ambiguity tolerance suggests that the underlying structures which generate manifest expressions of cognitive style may be associated with the meaning of the contents under cognition. In contrast to personality-based theories of the relationship between cognitive style and content, this would imply variability in the relationship between ambiguity tolerance and ideological conservatism across different content domains. Rather than a single universal law accounting for the relationship between cognitive style and ideological beliefs, cross-content variability in the pattern of associations is to be expected.

Before examining this hypothesis, the present chapter first develops a scheme whereby the four

social psychological theories may be evaluated. The results of two studies which employ the AAT scale to assess the relationship between cognitive style and ideological beliefs are then reported. Finally, the results are discussed in terms of an anti-universalistic conception of cognitive style.

## Theoretical predictions

The social psychological theories which have undertaken to explain the relationship between cognitive style and ideological beliefs have been discussed in Chapter 2. These accounts have relied largely on personality theory, but have offered widely different predictions of this relationship. Here, these predictions are explained and summarized so that they may be evaluated in the empirical work which follows.

Table 5.1 provides a summary of the theoretical predictions relating to the nature of cognitive style. The second and sixth columns of the table refer to the trait-like manner in which cognitive style has been conceived by most theory. By theorizing pervasive individual differences in cognitive style, authoritarianism, extremism theory, and context theory all anticipate tolerance of ambiguity to be generalized across content domain, and from individual expressions to social expressions. Consequently, they predict that cognitive style toward different authorities will constitute a unidimensional factor, and they propose an isomorphic relation between this unidimensional factor and tolerance of attitudinal diversity across society. These predictions were not confirmed by Study 1. Tetlock, in contrast, is far less clear in his predictions. As has been noted (see pp. 51 & 91-92), at times he treats cognitive style as a trait while on other occasions he theorizes cross-content variability in cognitive complexity. To the extent to which he emphasizes individual variability over content, he does not theorize an isomorphism between individual expressions of cognitive style.

This chapter focuses on the relationship between cognitive style and ideological beliefs. Three salient features of this relationship are recorded in Table 5.1. The first concerns its direction. While authoritarianism, extremism, and context theories all conceptualize cognitive style as a personality trait, they offer different reasons as to why this trait should be associated with ideological contents. In so doing, they hypothesize different relationships between cognitive style and content. The psychodynamic account of Adorno *et al.* (1950) argues that ego-threat emanating deep-seated emotional ambivalence is dissipated by the simultaneous use of stylistic defences such as intolerance of ambiguity, and content-based defences, including ideological conservatism, ethnocentrism, and authoritarian attitudes. As such, they anticipate a direct negative

relationship between tolerance of ambiguity and ideological conservatism, with high-scoring conservatives being less tolerant of ambiguity than liberals.

**Table 5.1:** Theoretical distinctions between four theories of cognitive style

Theory	Cognitive Style	Relationship between tolerance of ambiguity and ideological conservatism			Personal and social expressions
	Trait	Direction	Commitment	Content effect	Isomorphism
Authoritarianism	Yes	- linear	No	No	Yes
Extremism	Yes	n-shaped	Yes	No	Yes
Context	Yes	v-shaped	Yes	Conditional	Yes
Value pluralism	unclear	variable	No	Yes	No

Rokeach's (1956a, 1960) extremism theory offers a similar psychodynamic account, but in contrast to Adorno *et al.* (1950), Rokeach argues that ideological commitment is a central mediating variable in the relationship between cognitive style and content. By arguing that extreme ideological orientations demand submission and commitment to absolute authorities, and that this commitment satisfies the psychodynamic desires of dogmatic individuals, Rokeach theorizes the authoritarian-like traits — including intolerance of ambiguity — of both the ideological Left and Right. In addition to satisfying psychodynamic defences, Rokeach argues, ideological commitment is also related to intolerance of ambiguity. For, by accepting the word of an "absolute authority" as final, dogmatic individuals organize the world unambiguously into those who accept and reject the said beliefs of the authority, and employ cognitive strategies of isolation, rigid categorization and denial in defending these beliefs. Accordingly, Rokeach proposes a curvilinear, n-shaped relationship between ambiguity tolerance and ideological radicalism-conservatism, with extremists being less tolerant of ambiguity than moderates.

Context theory also suggests that ideological commitment and interest will be associated with the relationship between cognitive style and content. Sidanius (1984, 1985, 1988b; Sidanius & Lau, 1989) argues that certain personality traits such as tolerance of ambiguity allow individuals to resist "modal conformity" and adopt deviant or extreme ideological positions. This in turn encourages extremists to greater effort in political information search, to display more complex cognitive skills, and to be more genuinely interested in politics and more committed to their ideological beliefs. Consequently, Sidanius hypothesizes a curvilinear, v-shaped relationship between tolerance of ambiguity and radicalism-conservatism, with extremists on both ends of the

spectrum displaying greater tolerance of ambiguity, political sophistication and ideological interest and commitment.

In contrast to the three personality-based theories, Tetlock is far less explicit in his predictions. On the one hand, value pluralism theory anticipates a n-shaped curvilinear relationship between integrative complexity and radicalism-conservatism (Tetlock, 1984, 1993). According to Tetlock, extreme ideological orientations of the twentieth century are monistic in comparison with (pluralistic) moderate ideologies, offering their supporters simple cognitive means (i.e., bolstering and denial) to reduce conflict between opposing ideological values. By so arguing, Tetlock's account of cognitive style is remarkably similar to that proposed by personality theorists, for individuals are supposed to possess a characteristic style as determined by their ideological orientation. The more general value conflict theory, on the other hand, argues that the relationship between cognitive style and content is dependent upon the particular contents under cognition (Tetlock, 1986). It predicts a variable relationship between cognitive style and ideological beliefs over issues where different values are drawn into conflict. Nowhere, however, does Tetlock suggest that ideological interest or commitment would be associated with ideological orientation, and therefore does not consider this a possible mediating variable.

Since Tetlock has stressed ideology-by-issue variation, in Table 5.1 I have suggested that value pluralism theory proposes a variable relationship between cognitive style and content. However, in addition to his talk about monism-pluralism and personality traits of cognitive style, there is a further reason why Tetlock may expect a non-variable relationship over the different content domains investigated in this chapter. Tetlock argues that variability in cognitive style will be manifest only over issues which bring different, differentially important values into conflict (e.g., economic and civil rights offenses). However, the content domain covered by the AAT scale does not touch on a wide diversity of issues which may evoke different values. On the contrary, the scale includes only authorities. By drawing on Rokeach's (1973) theory, as Tetlock does, one would expect a single set of values — freedom versus equality (authoritarianism versus egalitarianism) — to predominate in evaluating different authorities. Thus, although Tetlock does theorize variability in the relationship between cognitive style and content, there are strong grounds for arguing that value pluralism theory would predict a consistent n-shaped relationship across the different domains of authority covered in the AAT scale.

The only other theory which could anticipate variability in the relationship between ambiguity tolerance and radicalism-conservatism is Sidanius' context theory. Authoritarianism and extremism theories cannot offer such predictions because, in addition to their general trait theory,



they postulate a much closer relationship between specific cognitive styles and ideological contents than do Sidanius and Tetlock.<sup>1</sup> Authoritarian and dogmatic individuals are authoritarian and dogmatic — both in style and content — in the family, in religion, and in politics. Sidanius, however, can anticipate cross-content variability in the relationship since he has divorced cognitive style from content, and suggests that, depending on context, the same style may be associated with different contents (see pp. 43-44). Variability in the relationship between ambiguity tolerance and conservatism would, however, be conditional on a negative association between the conservatism of beliefs in two different content domains. This could occur, for example, if religious conservatism and political liberalism were both normative in a particular context. In this case, individuals who are intolerant of ambiguity would be religious conservatives, but political liberals.

Despite its ambiguities, Tetlock's theory is the most convincing of the four because it explicitly theorizes ideology-by-issue variation in cognitive style. Thus, while the expectations of all four theories will be examined in the work which follows, Tetlock's will receive the most attention. The main feature which distinguishes Billig's anti-universalistic account of cognitive style from Tetlock's theory is the emphasis Billig gives to the context of cognition. This difference stems from two very different conceptions of belief conflict. Tetlock's dualistic theory suggests that (self-contained) individuals attempt to resolve dilemmas between Rokeachian terminal values. While value conflict may vary according to the particular issue under consideration, the values themselves are considered to be universal, and to a large degree independent of context (see pp. 94-96). Consequently, the conflict associated with reconciling two incompatible values — for example, whether to raise income tax toward a larger defence budget — will arise in any context (e.g., academic, religious, business), for this is seen as a dilemma in the world external to the individual which needs to be thought through and solved.

Billig's dialogical theory, in contrast, takes the thoroughly social nature of cognition into consideration. Not only is cognitive style expected to vary over content domain, but this variability will be influenced by features of the context of cognition. According to Billig (1985a, 1987a; Billig *et al.*, 1988), dilemmas and value conflict are emergent features of an ideological context. Value conflict is not defined in terms of dilemmas which exists out in the world (to be found and resolved by the subject). On the contrary, value conflicts and ideological dilemmas are created and resolved actively between people within contexts where meanings are socially

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<sup>1</sup> In attempting to establish universal accounts of the relationship between cognitive style and content, cognitive style is only properly split off from cognitive content (theoretically and methodologically) during the 1980's (see chap. 1).

negotiated (cf. Shotter, 1993a). Because of the complex nature of meanings within a particular context, Billig anticipates variability in cognitive style over quite subtle differences in ideological content. He can, for example, accommodate differences between ambiguity tolerance of political and conservative political authorities, not because they involve different values, but because within a certain context they may rouse vastly different meanings.

A rhetorical account of cognitive style thus recommends that the ideological context of cognition is central to the relationship between cognitive style and content. This may explain Tetlock *et al*'s (1989) "unexpected" finding that "the number of conservative thoughts was correlated with integrative complexity" (p. 635). Since the study took place in a liberal context, perhaps the findings are not so unexpected. By taking the social nature of value conflict into consideration, one could argue that conservatives experienced more value conflict in thinking about affirmative action and capital punishment than did liberals. In a conservative context the relationship between cognitive style and ideological beliefs may be reversed.

The main theoretical differences between the four social psychological accounts which have been discussed here (and summarized in Table 5.1) will be examined in the two studies reported below. Study 2 presents different aspects of the same data which were collected for Study 1 (reported in the previous chapter). Here we focus on the relationship between radicalism-conservatism and the factors of the AAT scale, Budner scale, and the IO scale. Study 3 reports the results of a study which aimed to re-examine (a) the validity of the AAT measurement procedure, and (b) the relationship between cognitive style and content, with a different set of contents as scale items.

## Study 2

A student sample from a historically liberal, White English-speaking South African university was deemed appropriate for studying the relationship between ideological beliefs and ambiguity tolerance. These students were expected to manifest high levels of value conflict within the political sphere. The student population at UCT has a history of anti-apartheid protest, and has upheld the liberal values of freedom, equality, and democracy. Recent change has, however, complicated matters somewhat. While progress has been made toward these liberal ideals, this has been accompanied by increased uncertainty and threat. The clear-cut options between the "bad" apartheid and the "good" liberation no longer exist. Change has eased economic sanctions and reduced the international pariah status of White South Africans. At the time of the study

(1993), however, it had also produced increased levels of crime, violence, and economic uncertainty. This affects these students directly, for security is threatened and employment prospects are diminished. Such threat and uncertainty is expected to be associated with generally intolerant, conservative, and authoritarian inclinations (Berry, Kalin & Taylor, 1977, chap. 7; Sales, 1973). This cuts across the racial divide. In the eyes of many Whites, it is largely Black radicals who are propagating the violence. In addition to the negative effects that violence and mass action have on the economy, affirmative action policies are also seen to be responsible for the lack of employment opportunities. Therefore, one would expect liberal and non-racist values to conflict with conservative and racist tendencies among these White students.<sup>2</sup>

In contrast to the students' ambivalence, the university presents an image of a liberal and non-racist institution. Affirmative action is publicly advocated in both staff and student selection. Moreover, the university has been trying to 'restructure' itself as a multiracial institution, and has instituted a body with powers to police and convict people of racism. While these efforts may seem insufficient in the eyes of many (radicals), it is widely recognised that powerful norms toward liberalism and non-racism exist in the university. This fact was forcefully demonstrated in the study undertaken to validate a conservatism scale among UCT students. 'Apartheid' was rejected by all respondents, while 'the new South Africa' was almost unanimously accepted.

The university setting provides an ideal context to study the relationship between ambiguity tolerance and radicalism-conservatism, because it is possible to derive expectations which are directly opposed to the widely accepted predictions of Adorno *et al.* (1950). The students' conflict between liberalism and conservatism is played out under powerful norms and "pressures and suggestions" toward liberalism and non-racism. Under these circumstances, conservative and racist attitudes will conflict with institutional norms to a greater extent than liberal and non-racist attitudes. In direct contrast to the expectations of Adorno *et al.* (1950), therefore, conservatives should experience higher levels of belief conflict within the university context, and be more tolerant of ambiguity than liberals.

In this study, the lack of anonymity may have been vital to the findings, making institutional norms salient and rendering the subjects accountable to their responses in the context of the university (and a "scientific psychological study"). This may have pronounced any possible value conflict that the subjects experienced between opposing discourses within the institutional setting.

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<sup>2</sup> The ambivalence between non-racism and apartheid/capitalist values among liberal White South Africans has been discussed by Dixon *et al.* (1994).

The use of formal lecturing time further aided efforts to increase the salience of institutional university norms.

Because the relationship between cognitive style and ideological beliefs may be influenced by a number of extraneous variables, this study — unlike most of the research conducted in this area — controls for possible mediating variables, including the effects of education and intelligence (Chown, 1961; Schaie, 1958; Schroder *et al.*, 1967; Scott *et al.*, 1979), and ideological commitment, interest, and involvement (Rokeach, 1956a, 1960; Sidanius, 1984, 1985). Education was controlled in the present study by the use of first year psychology students. While this does not eliminate the influence of intelligence, it may reduce it (Schroder *et al.*, 1967). In a related area, Schönbach (1981) has argued that "the correlations between intelligence and prejudice drop to fairly low levels if educational status is controlled" (p. 127). Measures of political interest and religiosity were employed to partial out the influence of ideological commitment toward these domains.

## Method

### Sample and procedure

The sample and procedure was precisely the same as that reported in Study 1. The only difference is that here, the results for the White sample form the primary focus of the study. There were two reasons for this. Firstly, the Black and Coloured samples were too small for the AAT factors to be analyzed by polynomial regression procedures, which included up to 14 independent variables. Secondly, an anti-universalist theory of the relationship between cognitive style and content recommends an analysis of the contextual meaning of cognitive contents. As a White researcher, I have inadequate understanding of the meanings that various conservative beliefs have for Black and Coloured students at UCT, so the theoretical implications of any set of results would be unclear. One can be sure though that measures of racism, authoritarianism, and conservatism certainly have different meaning for these different groups.

### Measures

In addition to the socio-demographic items and measures of ambiguity tolerance which were discussed in Study 1, the first questionnaire included also Duckitt's (1990) Right-Wing Authoritarianism scale and measures of religiosity and political interest; and the second questionnaire included measures of conservatism and racism.

## **Ideological beliefs**

Although the main focus of the thesis is cognitive style, investigating the relationship between cognitive style and ideological beliefs involved a substantial amount of preliminary work in developing a measure of ideological conservatism, appropriate for use with a South African sample. A new measure of conservatism was needed, primarily, because the original Wilson-Patterson (1968) scale consists of many items which are dated and culture-bound, and which are totally inapplicable to the South African context. In addition, the construct of conservatism is contested, and it would be inappropriate to assume uni- or multidimensionality in the work which follows. In order that the preliminary analysis of conservatism does not detract from the focus of this chapter, a full discussion of the development of the Conservatism scale is reported in Appendix D. Overall, conservatism is conceived as a "fuzzy set" of oblique factors which varies cross-culturally. Seven indices of conservatism were used in the analysis which follows: the total conservatism scale plus its three factors — religious conservatism, political and economic conservatism, and punitiveness — as well as Duckitt's measures of Right-Wing Authoritarianism and Subtle Racism, and a measure of self-ranked liberalism-conservatism.

## **Ideological commitment**

Measures of religiosity and political interest were included to determine their potential influence as variables mediating the relationship between cognitive style and ideological beliefs in religious and political domains.

### *Religiosity*

Religiosity was assessed by means of the balanced, eight item scale developed by Rohrbaugh & Jessor (1975) (see Appendix B, Section 3, items 1-8). The scale has been found to be a valid and reliable unidimensional measure, relevant to both "conventional and unconventional religious involvement" (Rohrbaugh & Jessor, 1975, p. 137). As the scale has been associated with fundamentalism of religious convictions, it was considered a suitable as a measure of religious ideological commitment.

### *Political commitment*

A four item Likert-type measure was developed to assess the degree to which subjects were committed to, or interested in political affairs (see Appendix C, Section 2, items 5-8). Items were based on Sidanius' (1988b) measure of "cognitive orientation toward politics", but also included emotive aspects of political involvement.

## Results

Initial principal factor analyses of the Right-Wing Authoritarianism scale, the Subtle Racism scale, and the Religiosity scale found them all to be unidimensional. The alpha coefficients for all three scales were adequate (RWA,  $\alpha = .75$ ; Subtle Racism,  $\alpha = .79$ ; Religiosity,  $\alpha = .92$ ). One item of the Political Interest scale (Appendix B, Section 1, item 8) was deleted due to its low item-total correlation. The remaining three items had an alpha coefficient of .84. The distribution of scores for all measures of conservatism and ideological interest was normal.

The mean differences in Religiosity and Political Interest scores for the three samples were anticipated (see Table 5.2). The trend for Black students to be more politicised than their White counterparts is widely recognised, and has been explained in terms of socialization surrounding the struggle for liberation (Danziger, 1963; Hyslop, 1990). The relatively low levels of Religiosity was also expected from the liberal White sample.

**Table 5.2:** Univariate statistics for all indices of ideological commitment

Ideological commitment	Group Differences <sup>a</sup>	Population group								
		White			Black			Coloured		
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
Pol. Interest	R2 = .02	10.27 a	6.81	298	13.15 b	8.92	84	10.05 a	6.64	74
Religiosity	R2 = .08	15.72 a	8.10	301	19.15 b	7.44	87	21.33 b	6.64	76

**Note.** Significant multiple comparisons [Newman-Keuls] arranged from the smallest mean (a) to largest (b) ( $\alpha = .05$ ).

<sup>a</sup>Effect sizes are reported for significant group mean differences ( $\alpha = .05$ ).

Two types of analysis were undertaken to assess the relationship between the indices of ambiguity tolerance and ideological conservatism. Correlation coefficients were generated in order to estimate the direction and strength of linear association between the various measures of ambiguity tolerance and dimensions of conservatism. Correlation matrices were also employed to identify any relationships between tolerance of ambiguity and Political Interest and Religiosity. Multiple polynomial regression analyses were then performed to identify curvilinearity in the relationship between tolerance of ambiguity and sociopolitical beliefs, and to partial out the possible effects of ideological commitment.

## Correlational analysis

Tables 5.3a, 5.3b, and 5.3c report the matrix of correlations between the 13 indices of ambiguity tolerance and six indices of ideological conservatism for the White, Black, and Coloured samples respectively. The results reiterate the conclusions reached in Study 1 regarding the generalized personality status of ambiguity tolerance. First, by suggesting that the form of the relationship between ambiguity tolerance and conservatism varies over domain of cognition, they highlight the need to distinguish between ambiguity tolerance toward different contents. Second, since only certain dimensions of conservatism were associated with each AAT index, the results indicate that it is imperative to distinguish between different dimensions of conservatism. In contrast to early personality models which treated conservatism and cognitive style as isomorphic and pervasive unitary traits, the variability in the results suggests that there are a number of different relationships between cognitive style and ideological content, depending on what aspect of conservatism and which domain of cognitive style one is talking about. Consequently, the results imply that personality measures of ambiguity tolerance (e.g., the Budner scale) may produce misleading results within particular content domains. Finally, the marked cross-cultural variability which was evident in the pattern of relationships, suggests that social determinants may influence the relationship between ambiguity tolerance and ideological conservatism.

For the White sample, the vector of sociopolitical beliefs was correlated with AAT-Total, AAT-Fam, AAT-Rel, and all the Budner indices in the negative linear manner predicted by the theory of authoritarianism. While the correlations between the Budner scale and ideological beliefs may be spurious, arising out of common ideological scale content, the correlations involving the AAT scale do not suffer from this problem. Conservative White subjects were more intolerant of ambiguity toward familial and religious authorities than liberals in the UCT context. However, the opposite relationship held true for tolerance of ambiguity toward conservative political authorities. In a relationship diametrically opposed to the predictions of authoritarianism, individuals endorsing conservative beliefs were more tolerant of ambiguity toward conservative political authorities than liberals. Furthermore, AAT-Pol and Ideological Orthodoxy were orthogonal to all indices of ideological conservatism. This is unanticipated by the theory of authoritarianism as it suggests that the antidemocratic demand for belief congruence across society was just as prevalent among liberals as it is among conservatives. Overall, cross content variability appears to have a significant impact on the strength and direction of association between tolerance of ambiguity and ideological beliefs.

**Table 5.3a:** Correlations between ambiguity tolerance and ideological conservatism (White).

	C-Tot	C-Rel	C-PEC	C-Pun	RWA	SR
AAT-Total	-.28**	-.31***	-.09	-.13	-.18	.01
AAT-cPol.	.38***	.14	.34***	.43***	.41***	.49***
AAT-Political	.07	.05	.12	.11	-.02	.01
AAT-Family	-.42***	-.27*	-.31**	-.34***	-.37***	-.26*
AAT-Religious	-.51***	-.54***	-.15	-.31**	-.23*	-.03
Budner	-.40***	-.33***	-.17	-.33***	-.36***	-.29**
B1	-.27**	-.18	-.17	-.25*	-.19	-.29**
B2	-.22*	-.17	-.05	-.30**	-.19	-.15
B3	-.07	.03	-.08	-.18	-.10	-.25*
B4	-.17	-.10	-.11	-.16	-.30**	-.10
B5	-.25*	-.28**	-.12	-.03	-.22*	-.28**
B6	-.20	-.23*	.00	-.16	-.16	-.14
IO	.02	-.02	-.05	.11	-.09	.12

\* $p < .01$ . \*\* $p < .001$ . \*\*\* $p < .0001$ .

**Table 5.3b:** Correlations between ambiguity tolerance and ideological conservatism (Black).

	C-Tot	C-Rel	C-PEC	C-Pun	RWA	SR
AAT-Total	-.06	-.25	.38*	-.10	-.23	-.21
AAT-cPol.	.05	-.11	.18	-.05	.02	-.08
AAT-Political	.09	-.19	.58***	-.05	-.15	-.07
AAT-Family	-.06	-.16	.38*	-.18	-.23	-.26
AAT-Religious	-.34	-.43*	-.05	-.12	-.39*	-.41*
Budner	.00	-.08	.25	-.06	-.07	.09
B1	.15	.13	.08	.03	.00	.04
B2	.07	-.10	.43**	-.07	.04	-.01
B3	-.07	-.23	.06	.04	.08	-.09
B4	-.15	-.09	-.08	-.11	-.40*	.07
B5	.13	-.05	.31	.18	-.19	.08
B6	.01	.04	.06	-.07	.06	.12
IO	-.33*	-.27	-.04	-.36*	-.08	.05

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Table 5.3c:** Correlations between ambiguity tolerance and ideological conservatism (Coloured).

	C-Tot	C-Rel	C-PEC	C-Pun	RWA	SR
AAT-Total	-.22	-.36*	.12	-.11	.05	.02
AAT-cPol.	.31	.27	.15	.28	.16	.31
AAT-Political	.01	-.08	.22	.06	.04	.26
AAT-Family	-.61***	-.59***	-.20	-.46**	-.29	-.05
AAT-Religious	-.50***	-.60***	-.17	-.22	-.20	-.24
Budner	-.35*	-.36*	-.21	-.12	-.06	-.17
B1	-.40**	-.39**	-.17	-.27	-.05	-.12
B2	-.13	-.16	-.04	-.03	.15	.01
B3	.11	.31*	-.21	.00	.10	-.11
B4	-.05	.00	-.15	-.02	-.14	.06
B5	-.12	-.21	-.13	.12	-.09	-.24
B6	-.17	-.15	-.08	-.14	-.06	-.03
IO	-.37**	-.43**	.05	-.31*	-.25*	.16

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .



In addition to mediating the strength and direction of the relationship between ambiguity tolerance and ideological beliefs, each content domain of ambiguity tolerance was only related to certain sets of beliefs. This finding reinforces the necessity to distinguish between different dimensions of ideological conservatism rather than treating conservatism as a unidimensional construct (see Appendix D). For the White sample, AAT-Rel was not associated with Political and Economic Conservatism or with Subtle Racism. Instead, it was strongly associated with Religious Conservatism and Punitiveness. The opposite holds true for tolerance of ambiguity toward conservative political authorities. AAT-cPol was unrelated to Religious Conservatism, but strongly related to Subtle Racism. These findings suggest that a relationship between the style and content of cognition is manifest only when there is a meaningful connection between a particular set of beliefs and a specific content domain of ambiguity tolerance. The findings warn against making general statements to the effect that cognitive style predisposes individuals to conservative ideology.

The vague conceptual status and ideological bias of the Budner scale makes its results difficult to interpret (see pp. 75-76). Nevertheless, some conclusions can be drawn from the intercorrelation matrix for the White sample. Despite their common ideological content, the Budner scale and its factors were less strongly associated with the indices of ideological beliefs than the AAT factors. Furthermore, the Budner scale was unrelated to Political and Economic Conservatism. Thus, in addition to its universalist assumptions and interpretative difficulties associated with ideological bias, the Budner scale explains less variance and is generally less useful in *predicting* political beliefs than the AAT scale.

Although the correlation matrices of the Black and Coloured samples differed from that of the White sample, the main findings were corroborated. In contrast to the predictions of all personality-based theories, the relationship between ambiguity tolerance and ideological conservatism varied across content domain and dimension of ideological conservatism; and included negative, positive, and orthogonal associations. Also, for all three groups, AAT-Pol and AAT-cPol were distinct from AAT-Rel. In all instances, AAT-Rel was negatively correlated with conservatism as anticipated by the theory of authoritarianism.

The varying pattern of correlations across the three groups may provide clues as to the dynamics underlying the associations. In contrast to the White sample, the associations between AAT-cPol and the indices of conservatism were orthogonal (rather than positive) for the Black and Coloured samples. This suggests that political beliefs — including racism, authoritarianism, political and economic conservatism, and punitiveness — were related to the style in which the White, but not

the Black or Coloured sample evaluated conservative political authorities. The lack of similar relationships for the Black and Coloured sample could be related to the fact that these subjects reject apartheid and conservative White politics unequivocally. In contrast, value conflicts surrounding political, economic, and race issues may have lead conservative White subjects to express some positive, albeit ambivalent, evaluation of conservative political authorities within the liberal context. The similar positive relationship between Political and Economic Conservatism and AAT-Pol and AAT-Fam for the Black sample suggests that value conflict underlying political conservatism among the Black subjects was related to ambivalent evaluation of political and familial authorities; perhaps indicating the presence of conflicting discourses in these domains. These results imply that value conflict surrounding ideological conservatism was only associated with ambivalent evaluation of those authorities which are meaningfully (materially and ideologically) related to that aspect of conservatism for the different social groups within this liberal context. More conservative and racist Whites may express some positive evaluation of conservative political authorities, despite the institutional censure, because of the possible material and social advantages which such politics promises.

If this reasoning is taken further, it may explain why different dimensions of conservatism tend to be related to each index of ambiguity tolerance for the different samples. While punitive, authoritarian, and racist beliefs were generally not related to ambiguity tolerance for the Black and Coloured samples, the correlations between AAT-Rel and the RWA and SR scales for the Black sample, for example, indicates that ambivalence toward religious authorities was associated with conservatism in these dimensions. Similarly, punitiveness among the Coloured sample could be related to conservative discourses within the family. The overall differences between the samples suggest that punitive, racist, and authoritarian beliefs are part of a part of a wider ideological constellation for Whites, whereas for the Black and Coloured samples, they are related only to a narrow domain of authority. Cross-cultural variability is further evident in the different pattern of associations between Ideological Orthodoxy and ideological conservatism across the three groups. Unlike the consistent non-significant correlations for the White sample, Ideological Orthodoxy was associated with Punitiveness and Religious Conservatism for the Black and Coloured samples. Although the direction of these relationships were consistent with the predictions of Adorno *et al.* (1950), given the cross-cultural variability and specificity of the domain of ideological conservatism with which IO was associated, a personality-based explanation seems implausible.

The overall pattern of results underscores the necessity to distinguish between different dimensions of tolerance of ambiguity and different forms of conservatism. Not only were

different factors of AAT scale associated with sociopolitical beliefs in different directions, but each AAT factor was only associated with particular (possibly predictable) dimensions of conservatism. These findings provide very strong evidence against a personality-based account of the relationship between cognitive style and sociopolitical beliefs, and warn against the common practice of employing single ("unidimensional") measures of both constructs to test research hypotheses. The results suggest that it is not a particular personality type, which is intolerant of ambiguity, who is predisposed to conservative beliefs. On the contrary, the content of various ideological beliefs are differentially related to ambiguity tolerance toward different authorities. While personality theory is stretched to explain the overall pattern of correlations, it may be explicable with reference to the different ideological belief systems of the various population groups. Ideological beliefs will only be related to the style of evaluating those dimensions of authority which are salient to that domain of ideology for each social group. Since apartheid has infiltrated all aspects of social authority for Whites, and has integrated racism, authoritarianism, and conservative political and economic policy into an interrelated and coherent whole, it is expected that more dimensions of conservatism will be related to ambiguity tolerance toward each domain of authority for the White sample.

These linear associations do not, however, cover the full range of predictions regarding the relationship between ambiguity tolerance and ideological conservatism. Both Rokeach and Sidanius argue that ambiguity tolerance should be related to ideological commitment, and that this association should underlie a curvilinear relationship between ambiguity tolerance and ideological conservatism. In order to examine the possible mediating effects of ideological commitment, the indices of ambiguity tolerance were correlated with Religiosity and Political Interest (see Table 5.4). Strong correlations were evident between the IO scale and Political Interest, and between AAT-Rel and Religiosity for all three population groups. Although there were a few other moderate correlations between the indices of ambiguity tolerance and ideological commitment, it appears as though the majority of the associations between ambiguity tolerance and ideological conservatism are not influenced by Religiosity and Political Interest. Nevertheless, this does not justify the standard practice of ignoring these variables completely since they may play a significant role within certain content domains.

Overall, the correlational analysis has raised some serious doubts concerning the validity of a personality-based theory of the relationship between ambiguity tolerance and ideological conservatism. The results indicate that the strength and direction of the relationship is dependent upon the content domain within which ambiguity tolerance is expressed. Rather than a generalized personality trait of intolerance of ambiguity finding expression in a whole vector of conservative

beliefs, it appears as though different types of conservatism are related to different cognitive styles within a particular context. The variability within a single context as well as the cross-cultural contrasts suggest that social factors — including the meaning of the ideological contents — may play a role in determining the nature of the relationship.

**Table 5.4:** Correlations between tolerance of ambiguity and Religiosity and Political Interest

Tolerance of ambiguity	Population group					
	White		Black		Coloured	
	Religiosity	Political Interest	Religiosity	Political Interest	Religiosity	Political Interest
AAT-Tot	-.30**	.08	-.26	-.02	-.35*	-.12
AAT-cPol	.14	-.22	.08	-.30	.27	-.17
AAT-Pol	.13	-.09	-.04	-.14	-.08	-.20
AAT-Fam	-.16	.14	-.17	.06	-.42**	.08
AAT-Rel	-.67***	.14	-.59***	.43*	-.53***	.07
Budner	-.20	.13	.02	-.03	-.17	-.07
B1	-.10	.13	-.33*	.13	-.18	-.11
B2	-.15	.08	.11	-.40*	-.02	-.23
B3	.05	.15	-.34*	.38*	.20	.11
B4	-.03	.00	-.07	.01	.00	.00
B5	-.06	.12	.15	-.12	-.09	.02
B6	-.25**	.13	.06	.37*	-.19	.19
IO	-.02	-.57***	.04	-.51***	-.27	-.41***

\* $p < .01$ . \*\* $p < .001$ . \*\*\* $p < .0001$ . for White sample.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . for Black and Coloured samples.

It now remains to consider whether tolerance of ambiguity is associated with sociopolitical beliefs in a curvilinear manner, and whether this relationship is evident over and above the influence of Political Interest and Religiosity.

## Regression analysis

Regression equations were developed for all indices of ambiguity tolerance. "New look" multiple regression procedures were employed; the purpose of which is to develop theoretical models rather than predicting or forecasting some criterion (Cohen & Cohen, 1983). As such, the

regression analysis proceeded by the hierarchical method recommended by Cohen & Cohen (1983). Sets of variables were entered into the regression equation on the basis of their predefined theoretical import. At places where *a priori* theoretical import could not be established, empirically grounded stepwise procedures were employed.

The regression analysis aimed to determine the form of the relationship between ambiguity tolerance and ideological conservatism over and above the possible mediating effects of ideological commitment. Therefore, Political Interest and/or Religiosity were entered into the models first in order to partial out the influence of ideological commitment before the indices of conservatism were modelled against each factor of ambiguity tolerance. Only in those instances where Political Interest or Religiosity accounted for very little variance relative to conservatism, and where conservatism could account for all the variance of the indices of ideological commitment, was the ideological commitment variable exited from the regression equation. As such, ideological commitment took priority as a covariate in the regression analysis, except in those instances where had no unique predictive power.

A number of preliminary analyses were undertaken for each index of ambiguity tolerance before the final models were developed. The first stage of analysis attempted to determine which dimensions of ideological conservatism were related to each index of ambiguity tolerance in a curvilinear manner. For each index of ambiguity tolerance, separate polynomial regression analyses were performed for all factors of ideological conservatism by modelling first the linear and then the quadratic score of conservatism against the index of ambiguity tolerance (Cohen & Cohen, 1983; Draper & Smith, 1981; Pedhazur, 1982). To reduce the problems associated with multicollinearity between the linear and curvilinear effects, and between the different oblique indices of conservatism, all variables of sociopolitical beliefs were standardized in order to "centre" them (Cohen & Cohen, 1983).

The second stage of analysis was empirically driven. All conservatism indices which were significantly ( $\alpha = .05$ ) associated with each ambiguity tolerance factor in the first stage of analysis were entered into the regression model for that factor of ambiguity tolerance. If Political Interest and/or Religiosity were significantly correlated with the particular index of ambiguity tolerance, they were entered into the regression equation first to partial out their variance. Following this, stepwise regression analysis was performed in order to select those indices of ideological conservatism which contributed significant unique explanatory variance. Stepwise procedures were employed here as no clear theoretical rationale existed by which to determine which ideological beliefs took precedence in the relationship with the particular index of

ambiguity tolerance. Thus, for example, whether AAT-Rel was associated with Religious Conservatism rather than any other index of conservatism, was left an empirical issue. The linear and quadratic components of ideological conservatism were entered into the stepwise procedure simultaneously (as sets) when both of these effects had been found to be significant (in Stage 1) (see Cohen & Cohen, 1983, chap. 4).

In the final stage of the analysis, the indices of ideological conservatism were once again entered into the model after the influence of Political Interest and/or Religiosity had been partialled out. The order of entry was determined by size of the F-ratio of the respective partial regression coefficients which had been identified in the stepwise (Stage 2) analysis. In this final stage, however, linear and curvilinear effects were not entered simultaneously. Linear effects were entered first, followed by the curvilinear effects. In this manner, it was possible to ascertain the size of the curvilinear effects for a particular variable once the influence of ideological commitment, more important linear and curvilinear effects, and the linear effect for that particular conservatism variable had been partialled out (cf. Cohen & Cohen, 1983; Draper & Smith, 1981; Pedhazur, 1982).

These torturous analytical procedures were necessary because of the high levels of multicollinearity present, and the large numbers of independent variables in relation to available degrees of freedom. Multicollinearity was apparent, not only between the linear and quadratic effects, but also between different indices of conservatism, and between conservatism and ideological commitment. In such instances, a hierarchical entry of variables — in order of theoretical import — is required as it ensures that the most important variables (including ideological commitment over conservatism, and linear over quadratic effects) remain in equation regardless of shared variance. Although regression analyses were computed for only the White sample, the available degrees of freedom were still insufficient to produce stable regression models for the 14 possible independent variables, particularly in the light of multicollinearity. Therefore, preliminary elimination of independent variables at Stage 1 was necessary before all variables were entered into the stepwise procedure in Stage 2.

It will be recalled that for the White sample, AAT-Pol and Ideological Orthodoxy were not linearly associated with ideological beliefs. The polynomial regression analysis performed in Stage 1 indicated that these variables were associated with ideological conservatism in a curvilinear manner (see Table 5.5). AAT-Pol was associated with the RWA scale and the Subtle Racism scale in a negative quadratic manner, and Ideological Orthodoxy was related to Religious Conservatism, also by a negative quadratic function. These relationships are congruent with the

predictions of extremism theory since they indicate that moderates demonstrated highest levels of ambiguity tolerance, while extremists on both the Left and Right were more intolerant of ambiguity.

**Table 5.5:** Curvilinear effects between tolerance of attitudinal ambiguity and sociopolitical beliefs

Tolerance of ambiguity	Conservatism				
	C-Total	C-Rel	C-PEC	RWA	SR
AAT-Pol				$R^2 = .059$ $F(1,120) = 7.58$ $p < .007$	$R^2 = .074$ $F(1,120) = 9.63$ $p < .003$
AAT-Fam			$R^2 = .030$ $F(1,119) = 4.03$ $p < .047$		
AAT-Rel			$R^2 = .063$ $F(1,119) = 4.94$ $p < .03$		$R^2 = .098$ $F(1,119) = 12.94$ $p < .0005$
B1	$R^2 = .027$ $F(1,146) = 4.32$ $p < .04$		$R^2 = .052$ $F(1,146) = 6.25$ $p < .003$		
IO		$R^2 = .099$ $F(1,148) = 16.45$ $p < .0001$			

**Note.** Partial correlation coefficients are reported for the entry of the quadratic effect after the linear effect has been partialled.

The correlational analysis reported in Table 5.3a had found AAT-Fam and AAT-Rel to be negatively associated with ideological conservatism for the White sample. The polynomial analysis suggested that, in addition to these linear effects, AAT-Fam was related to Political and Economic Conservatism in the positive quadratic manner predicted by context theory. AAT-Rel was associated with both Political and Economic Conservatism and Subtle Racism in a positive quadratic manner. Although these relationships take the form predicted by context theory, the latter is somewhat ironical since racism is the only set of beliefs which Sidanius argues is not related to ambiguity tolerance in a curvilinear manner. In contrast to these positive and negative quadratic functions, AAT-cPol was not associated with ideological conservatism in a curvilinear manner. The only Budner factor to attain curvilinearity was related to Total Conservatism and Political and Economic Conservatism by a positive quadratic function.

The direction of association between the various indices of ambiguity tolerance and ideological

conservatism has yielded support for the predictions of all three personality-based theories, and has yielded support for none. The factors of the AAT scale have been found to be associated with the indices of conservatism in (a) the negative linear direction predicted by authoritarianism, (b) the negative quadratic manner predicted by extremism theory, and (c) the positive quadratic manner predicted by context theory. The positive linear association between AAT-cPol and conservatism was, however, not anticipated by any of the three theories. Also not predicted by the three theories was the differential relationships between ideological beliefs and ambiguity tolerance toward different domains of authority. As personality-based theories, they anticipate similar associations over different content domains. It is also doubtful whether Tetlock could anticipate such a high degree of variability in the relationship across different domains of authority. Certainly, the value pluralism model does not anticipate the positive linear and positive quadratic relationships.

The analysis reported in Appendix D had found different indices of ideological conservatism to be highly intercorrelated for the White sample, but has also found important distinctions between different dimensions of conservatism. Thus, while it is essential to consider different dimensions separately, they share a substantial amount of variance. Consequently, many of the linear and curvilinear relationships between the indices of conservatism and the AAT factors are redundant. The second stage of analysis involved stepwise regression analysis, after the effects of Political Interest and/or Religiosity had been partialled out. This was done as a means of identifying those indices of ideological conservatism which contributed the most unique explanatory variance to the regression models. If both a linear and a quadratic effect had been identified as significant in the first stage of analysis, they were entered into the stepwise procedure simultaneously.

Final regression models were developed in the third stage of analysis. Here, variables were entered into the regression equation by the "step up" procedure, in order of their importance as identified in the (Stage 2) stepwise analysis (Howell, 1991). The significance of linear effects cannot be ascertained from the simultaneous regression analysis of both the linear and the quadratic terms since these simultaneous effects are highly unstable due to multicollinearity and possible suppression (Cohen & Cohen, 1983; Draper & Smith, 1981). The linear and quadratic effects were thus not entered together as sets, but quadratic effects were entered after the linear effects. The final regression coefficients for both the linear and quadratic effects were, however, derived from the final models for the simultaneous analysis (sets) of the independent variables (Cohen & Cohen, 1983; Draper & Smith, 1981).

The final regression models for each index of ambiguity tolerance are reported in Table 5.6. The



multiple regression analysis clarified and extended earlier findings regarding: 1) which dimensions of conservatism were the most important predictors of each index of ambiguity tolerance, 2) the influence of ideological interest and commitment as a potential mediator variable, and 3) the overall shape of the relationship between each index of ambiguity tolerance and ideological conservatism.

First, considering only the dimensions of ideological conservatism which were associated with the AAT factors, a distinction may be drawn between expressions of ambiguity tolerance toward political authorities on the one hand, and religious and familial authorities on the other. Both AAT-cPol and AAT-Pol were related to the Subtle Racism scale and aspects of authoritarianism (including the RWA scale and Punitiveness). This is not surprising since racism and authoritarianism have been the foundation of the political ideology of apartheid in South Africa (cf. Foster, 1991). It is especially noteworthy that the RWA scale was associated with AAT-Pol, whereas it was the authoritarian aggressive aspects of Punitiveness which were associated with AAT-cPol. Although these results were derived from empirical (stepwise) procedures, they resonate strongly with what one would expect by intuition. It appears as though ambiguity tolerance toward a domain of authority is related to only those beliefs which are salient for that domain. To carry this argument further, it appears as though a general conservatism factor was the most salient set of belief contents associated with ambiguity tolerance of religious and familial authorities. AAT-Fam was associated with Total Conservatism and marginally with RWA, while AAT-Rel was associated only with Total Conservatism. Not only do these findings underscore the necessity to distinguish between different dimensions of ideological conservatism, but they demonstrate the need to differentiate between ambiguity tolerance toward different content domains. Furthermore, the results suggest that ambiguity tolerance is associated only with those beliefs which are implicated in the domain toward which ambiguity tolerance is expressed. As this is to be expected, the findings confirm the validity of the AAT scale.

It is significant that many of these effects were manifest over and above the mediating influence of Religiosity and Political Interest. While these findings do not rule out the possibility that other variables may underlie the relationship between sociopolitical beliefs and ambiguity tolerance, they do suggest an intimate relationship between the content and the style of cognition within any particular context. In contrast, the relationship between the dimensions of conservatism and AAT-Total and Ideological Orthodoxy were reduced to non-significant levels once the Religiosity and Political Interest had been partialled out. Similarly, the relationship between AAT-Rel and Total Conservatism, while still significant, was substantially reduced once Religiosity had been partialled out.

Table 5.6: Regression equations for all indices of tolerance of ambiguity.

Tolerance of ambiguity	Regression results					
	Model	Regressor	$\beta$	$t$	$p$	Partial $R^2$
AAT-Tot	$R^2 = .09$ $F(1,148) = 14.84$ $p < .0002$	Religiosity	-.30	-3.85	.0002	.091
AAT-cPol	$R^2 = .32$ $F(3,118) = 27.84$ $p < .0001$	SR	.39	4.83	.0004	.242
		C-Pun	.30	3.66	.0001	.077
AAT-Pol	$R^2 = .11$ $F(2,119) = 7.14$ $p < .001$	(SR) <sup>2</sup>	-.23	-2.52	.03	.074
		(RWA) <sup>2</sup>	-.19	-2.09	.04	.033
AAT-Fam	$R^2 = .20$ $F(2,119) = 15.15$ $p < .0001$	C-Total	-.31	-3.11	.002	.176
		RWA	-.20	-2.00	.05	.027
AAT-Rel	$R^2 = .48$ $F(2,119) = 54.39$ $p < .0001$	Religiosity	-.56	-7.01	.0001	.447
		C-Total	-.21	-2.63	.01	.03
Budner	$R^2 = .18$ $F(2,148) = 16.64$ $p < .0001$	C-Total	-.28	-3.12	.002	.157
		RWA	-.20	-2.21	.03	.027
B1	$R^2 = .12$ $F(2,146) = 9.52$ $p < .0001$	SR	-.29	-3.77	.0002	.086
		(C-PEC) <sup>2</sup>	.18	2.36	.02	.034
B2	$R^2 = .09$ $F(1,147) = 14.37$ $p < .0002$	C-Pun	-.30	-3.79	.0002	.089
B3	$R^2 = .06$ $F(1,147) = 9.75$ $p < .002$	SR	-.25	-3.12	.002	.062
B4	$R^2 = .09$ $F(1,147) = 14.36$ $p < .0002$	RWA	-.30	-3.79	.0002	.089
B5	$R^2 = .14$ $F(2,146) = 12.32$ $p < .0001$	SR	-.26	-3.37	.001	.081
		C-Rel	-.25	-3.30	.001	.064
B6	$R^2 = .06$ $F(1,147) = 9.76$ $p < .002$	Religiosity	-.25	-3.12	.002	.062
IO	$R^2 = .34$ $F(1,296) = 149$ $p < .0001$	Political Interest	-.58	-12.24	.0001	.335

These findings indicate that the relationship that AAT-Total, AAT-Rel, and Ideological Orthodoxy have with ideological conservatism may be a byproduct of the mediating influence of ideological commitment. Ambiguity tolerance towards religious authorities appears to be related to commitment to religious beliefs rather than to the orthodox or liberal nature of these beliefs. This was a major difference between expressions of attitudinal ambiguity tolerance toward political and religious authorities. *Whereas ambivalent evaluation of political authorities was associated with political belief contents (radicalism-conservatism), similar evaluation of religious authorities was associated with commitment to religion rather than any particular religious contents (orthodoxy).* Similarly, the Ideological Orthodoxy characteristic of opinionation was associated with interest in politics regardless of the content of the beliefs of interest. For both Ideological Orthodoxy and AAT-Rel, the effect size for these relationships was very strong, indicating the importance of these variables as predictors of ambiguity tolerance.

The role of ideological commitment as a mediator variable is congruent with Rokeach's (1956a, 1960) theory of dogmatism and with context theory. These theories suggest that the relationship between cognitive style and beliefs is not direct, but that it is the byproduct of the underlying relationship between commitment and cognitive style on the one hand, and between commitment and ideology on the other. Dogmatic individuals, for example, uphold extremist ideologies, not because of a direct relationship between dogmatism and the beliefs of the extremist ideologies, but because these ideologies demand high levels of commitment to an absolute authority. For context theory, individuals who are tolerant of ambiguity have the potential to appropriate extremist ideologies. Since these ideologies are deviant, these individuals demonstrate higher levels of ideological interest and active participation in information gathering in order to sustain their deviant ideological positions.

Although the present results confirm the import of ideological commitment as a mediator variable, they do not support the predictions of either context theory or extremism theory. The form of the relationship between ambiguity tolerance and conservatism, which ideological commitment mediates, varies over content domain. In support of extremism theory, Political Interest mediates a negative quadratic relationship between Ideological Orthodoxy and Religious Conservatism. However, Religiosity mediates positive quadratic relationships between AAT-Rel and Political and Economic Conservatism and Subtle Racism, and a purely linear relationship between AAT-Total and Total Conservatism. Once again, the personality-based theories are questioned, not because no support can be found for them, but because, once different content domains of ambiguity tolerance are taken onto consideration, support may be generated for the predictions of all theories.

Similar conclusions may be drawn from the regression models of AAT-cPol, AAT-Pol, and AAT-Fam since the direction and strength of the relationships varies considerably over content domain. AAT-cPol was related to Subtle Racism and Punitiveness in a positive linear manner. Contrary to the predictions of Adorno *et al.* (1950), racist individuals were more tolerant of ambiguity toward conservative political authorities than were non racists. The effect size for this relationship was large ( $R^2 = .24$ ), indicating its strength, and suggesting that this was not a counterfactual anomaly. In contrast, AAT-Pol was related to Subtle Racism and Right-Wing Authoritarianism in a negative quadratic manner, with both high and low scoring racists being less tolerant of ambiguity than moderates. Although this relationship was in the direction predicted by extremism theory, it does not support the underlying dynamics by which Rokeach derives the relationship. Ideological commitment did not mediate the relationship between ambiguity tolerance and belief extremism. Finally, AAT-Fam was strongly related to Total Conservatism and Right-Wing Authoritarianism in the negative linear manner predicted by Adorno *et al.* (1950). Although this was the only model for the AAT factors which supported the theory of authoritarianism, it is potentially theoretically important since, according to Adorno *et al.* (1950), the relationship between cognitive style and ideological beliefs originates in early family interaction. Regardless of whether authoritarian dynamics underlie this relationship or not, it is definitely not generalized across different domains of authority as the theory argues.

In sum, the regression analyses for the AAT factors have confirmed the body of findings which have amassed throughout the thesis thus far. Tolerance of ambiguity is not a personality trait which is generalized across content domain or from personal expressions to a vector of tolerant ideological beliefs. Rather, ambiguity tolerance toward different contents are related to (a) different sets of ideological beliefs, (b) with different strengths, and (c) in different directions. A substantially different picture would have been generated if only the Budner scale had been employed. The Budner scale and its factors, although associated with different components of conservatism, were generally associated with these beliefs in the negative linear manner predicted by Adorno *et al.* (1950). It is interesting that the effect size for the models of the AAT factors are considerably larger than those for the Budner scale. This is perhaps surprising, for if the Budner scale and the AAT scale both assess the same cognitive style, but the Budner scale assesses conservatism in addition to ambiguity tolerance (i.e., content bias), then one would expect the Budner scale to have stronger associations with ideological conservatism than the AAT scale. Perhaps the small effect sizes for the Budner scale accrued purely due to content commonalities between the Budner scale and the measures of conservatism. In response to Ward's (1988) query regarding what the Budner scale measures, the regression analysis for this sample of White students suggests that, in part, the first four factors of the scale tap contents associated

with racist and authoritarian beliefs, while the last two factors are related to a religious dimension of conservatism.<sup>3</sup>

## Discussion

This study aimed to examine the predictions regarding the relationship between tolerance of ambiguity and ideological conservatism which have been advanced by the theory of authoritarianism, extremism theory, context theory, and value pluralism theory (see Table 5.1 for a summary of these predictions). Overall, the results for the Budner scale tend to support the theory of authoritarianism. Although the Budner scale is not unidimensional, its factors were linearly correlated with authoritarian and conservative beliefs in the direction predicted by Adorno *et al.* (1950). Moreover, these relationships did not originate in the mediating influence of ideological commitment. Because of possible content bias of the Budner scale, however, the cause of these associations remains unclear. Rather than authoritarian dynamics underlying the relationships, they may have accrued purely because of the shared content of the Budner scale and the measures of ideological conservatism.

The AAT scale, in contrast, does not suffer from this potential flaw as it assesses ambiguity tolerance in an active and direct manner, and does not infer cognitive style from attitudinal content. Like the previous findings in the literature as a whole, the results involving the AAT scale yielded evidence for aspects of all four theories, and evidence for none. Firstly, the direction of the relationship varied over content domain, with conservatism being related to the AAT factors according to positive and negative, linear and quadratic functions. This covers the full range of theoretical predictions, and includes a totally unanticipated positive linear correlation (between AAT-cPol and Subtle Racism). Moreover, the role of ideological commitment as a mediating variable was, but also was not, significant. While the indices of ideological commitment did account for the relationship between ambiguity tolerance and conservatism within some domains, as would be expected by extremism and context theory, for most AAT factors, ideological commitment played a minimal role.

Despite the varied and partial support for aspects of all four social psychological theories, the results for the AAT scale confute all theories because of the degree of manifest cross-content variability. The theories of authoritarianism and extremism do not entertain the possibility of

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<sup>3</sup> The secondary factor analysis of the Budner scale (see Table 4.5) makes a roughly similar distinction between the Budner factors.

variability since they offer global predictions on the basis of generalized personality functioning. The conditional variability which context theory could anticipate was also not evident because the dimensions of ideological conservatism were not negatively correlated with each other. Finally, for reasons mentioned in the introduction, it is uncertain whether Tetlock could anticipate the marked degree of variability that was evident over the circumscribed content domain covered by the AAT scale. Thus, besides the fact that only one of the final models (AAT-Pol) was of the direction predicted by Tetlock, the degree of manifest variability over these delimited content domains poses explanatory difficulties for value pluralism theory. If a politically conservative individual adopts a monistic cognitive style when evaluating political authorities, why should s/he appropriate a pluralistic style when evaluating conservative political authorities? This finding directly contradicts Tetlock's theorizing for the conservative orientation is argued to engender monistic styles, especially over such similar content domains.

The utility of the AAT scale is thus manifest at the level of interpretation. While one cannot be sure whether the linear effects between the Budner scale and conservatism were spurious, this is not the case for the AAT scale. In addition to the construct validity of the AAT scale (see pp. 111-114), and the direct tests and incidental indicators of measurement validity reported in Study 1 (see p. 130), this study has added to the set of validity criteria. Not only did the factor analysis of the AAT scale (see Table 4.2) distinguish clearly between the different content domains of ambiguity tolerance, but in this chapter it was found that these factors correlated most strongly with the ideological beliefs which are relevant to that domain of authority. As would be expected, ambiguity tolerance toward all political authorities were related to most strongly to racist and authoritarian beliefs among the White sample, whereas religiosity was associated with ambiguity tolerance of religious authorities.

Although the AAT scores have behaved in a manner which instills confidence in the validity of the measure, the results reported here cannot answer questions regarding the identity of the generative structures which underlie manifest expressions of ambiguity tolerance. Besides the methodological difficulties surrounding sampling and subject loss, this is largely due to the preliminary exploratory nature of the investigation. Although the results cannot identify generative structures, they do suggest that the underlying structures are social in nature. This conclusion is based on both the cross-cultural and cross-content variability in AAT scores within a single context. While a personality-based account would be hard pressed to explain these findings, they are easily accommodated by a theory which explains ambiguity tolerance toward a particular domain in terms of the meanings that ideological contents within that domain have for different groups of subjects within a particular context. Thus, although Whites with a

conservative orientation may value the political, economic, and social benefits which conservative political authorities wish to uphold, contrary to the predictions of Adorno *et al.* (1950), they evaluate these authorities ambivalently because conservative politics (and the ideology of apartheid) is taboo within the university context. Perhaps at a conservative political gathering the same individuals would evaluate conservative authorities far less ambivalently.

Such theorizing suggests that there is a close — but by no means stable, universal, or consistent — relationship between the style and content of cognition within particular contexts. This raises two clear difficulties with the study. Firstly, context was not manipulated, so the impact of the context could not be ascertained directly. Secondly, the relationship between the authorities of the AAT scale and the contents included in the measures of ideological conservatism was rather indirect. Although authority is central to any ideology, ambivalence toward authorities may be influenced by many other factors besides conflict surrounding ideological deviance. The following study attempted to expand further the investigation into the nature of ambiguity tolerance by documenting relationships between the endorsement of particular contents and ambiguity tolerance toward those same contents.

### Study 3

Study 3 was a "conceptual replication" of Study 2 (Hendrik, 1991). Its aims were threefold. The first objective was to reproduce the central findings of the previous study in a novel research design. The positive linear relationship between AAT-cPol and Subtle Racism, uncovered in the previous study, directly contradicted the predictions of all four social psychological theories which have sought to explain the relationship between cognitive style and content. As such, these findings hold potential theoretical import. Not only do they suggest that intolerance of ambiguity may be found in unexpected places along the radicalism-conservatism continuum, but they question the theoretical validity of universalistic individualism. This study planned to extend the investigation by examining whether similar unexpected results would be found with a different sample and different contents within the same context.

In the present study, subjects completed the Subtle Racism scale and the Right-Wing Authoritarianism scale in both the traditional Likert format, and the new unipolar format. On the unipolar rating scales, subjects were requested to rate each item by recording: 1) the highest degree to which they would, on occasion, agree with the item, and 2) the highest degree to which they would, on occasion, disagree with the item (see Appendix E, Section 5). Consequently, it was possible to ascertain levels of racism and authoritarianism, as well as levels of ambivalence

toward the same racist and authoritarian opinions. A direct relationship could thus be established between racist and authoritarian opinions and ambivalence toward these opinions.

In addition to corroborating the findings which were reported in Study 2, this study aimed to expand on the validity of the findings, and the validity of the AAT scaling procedure. This inquiry took two directions. First, replication was deemed necessary under conditions where subjects remained anonymous. It was argued that a lack of anonymity in the previous study would strengthen the salience of institutional norms which underlie the relationship between ambiguity tolerance and conservatism. However, unidentified factors associated with the lack of anonymity may have had some unknown influence on the results, and curtailed the validity of the findings. Second, the study aimed to reexamine the measurement validity of the AAT scaling procedure. The previous studies have reported concurrent validity statistics for the AAT scale as well as incidental results which demonstrate its measurement validity. The use of the Subtle Racism scale in the present study allowed firmer hypotheses to be offered whereby measurement validity could be established. To verify criterion group validity, it was hypothesized that, for obvious reasons, Blacks would be less ambivalent in their rejection of the items of the Subtle Racism scale than Whites.

Finally, the study aimed to investigate the nature of the generative structures which underlie manifest expressions of ambiguity tolerance. Study 2 argued that the variability in the relationship between cognitive style and content could not be explained in terms of a trait-like cognitive style which predisposed the individual to particular ideological contents. Instead, it was suggested that the contextual meaning of the ideological contents relevant to each domain of authority played a substantial role in shaping ambivalent responses toward those authorities. For example, the positive linear relationship between AAT-cPol and Subtle Racism was attributed to heightened levels of conflict which racist Whites experienced in evaluating conservative political authorities within the liberal context. Since the ideological contents under investigation in this study are similarly equivocal for politically conservative Whites within the UCT context, a similar positive linear relationship between racist and authoritarian beliefs and ambiguity tolerance toward these beliefs was expected. Moreover, since among the vector of authoritarian and conservative beliefs, it is racist beliefs in particular which are condemned within liberal South African contexts, it is likely that these beliefs would be more clearly associated with conflict for conservative individuals. Consequently, the positive linear relationship was expected to be stronger for racist beliefs than for authoritarian beliefs. In addition, since this study tapped a direct relationship between ambiguity tolerance and acceptance of the same beliefs, the strength of the relationships was expected to be stronger than those reported in Study 2.



As carryover effects may have been present in this "within-subjects" design, questionnaires were counterbalanced and randomly distributed to respondents. One half of the questionnaires contained the Likert scales at the beginning and the unipolar scales at the end. For the other half, the order of presentation was reversed. In both instances, the scales were separated by a number of other psychometric measures which constituted "filler tasks". In addition to these precautions, the respondents were instructed that the questionnaire was intended to "test a research design and not individuals", and they were requested to complete each page separately without reference to their preceding responses.

## **Method**

### **Sample**

The sample consisted of 184 first year psychology students at the University of Cape Town during 1992. Due to the disproportionate student composition at the university, the sample sizes for various subgroups was unbalanced, including 14 Blacks, 151 Whites (English-speaking), 19 Coloureds. Forty seven were male and 137 were female. Their mean age was 20.5 years. Respondents remained anonymous and the study was completed during formal lecturing time.

### **Measures**

The Subtle Racism scale and the Right-Wing Authoritarianism scale formed the main focus of the study. The psychometric properties of these measures have been described previously (Appendix D). The unipolar version of these scales was scored in the manner detailed earlier, with high scores indicating ambiguity tolerance. Detailed instructions were given as to how the unipolar version of these scales should be completed (see Appendix E, Section 5).

Two filler tasks were employed to reduce the influence of carryover effects. These included the Social Distance Questionnaire and the Ambivalence over Emotional Expression Questionnaire (King & Emmons, 1990). The Social Distance Questionnaire was an English translation of the one used by Groenewald (1975). It assessed social distance towards Blacks, English-speaking Whites, Coloureds, Afrikaans-speaking Whites, Indians, Jews, and Russians on a number of 7-level Bogardus-type measures (see Appendix E, Section 3). The Ambivalence over Emotional Expression Questionnaire (AEQ) was employed as an independent measure of ambivalence at the level of personality (see Appendix E, Section 2). As the scale was designed to measure consciously recognized ambivalent emotional striving, and since authoritarians are theorized to

repress ambivalent emotional striving (Adorno *et al.*, 1950; Frenkel-Brunswik, 1949), the AEQ was expected to correlate negatively with authoritarianism. The scale employed a 5-point Likert-type format, and has been found to be a valid measure and to have an adequate alpha coefficient of .89 (King & Emmons, 1990).

## Results

No significant differences were found in the mean scale scores or the size of the correlations between the two counterbalance conditions or across gender. Substantial differences were, however, found in the mean scores and correlation coefficients of the different population groups.

The alpha coefficients for the Attitudinal Ambiguity Tolerance scores for both the RWA scale ( $\alpha = .81$ ) and the Subtle Racism scale ( $\alpha = .84$ ) were satisfactory. In addition, AAT scores were normally distributed for both scales. Since the AAT-RWA scale was comprised of 14 items and the AAT-SR scale included 10 items, the scales are made comparable by computing mean scores for item means rather than scale means. The means and standard deviations for the two scales are reported in Table 5.7.

**Table 5.7:** Summary statistics for Tolerance of Attitudinal Ambiguity toward the RWA scale and Subtle Racism scale

Population group	Attitudinal Ambiguity Scale		Mean
	AAT-RWA	AAT-SR	
Black (n=12)	$M = .422, SD = .14$	$M = .291, SD = .16$	.357
White (n=148)	$M = .484, SD = .13$	$M = .448, SD = .16$	.466
Coloured (n=18)	$M = .492, SD = .11$	$M = .326, SD = .13$	.409
Mean	.481	.425	.453

Note. Scale means are not weighted for differences in sample size.

A one-way analysis of variance was computed to ascertain whether Blacks were indeed less ambivalent in their rejection of the Subtle Racism items than Whites. The mean item mean differences between the three population groups was significant ( $F(2,175) = 8.84, p < .0002, R^2 = .09$ ). Newman-Keuls comparisons revealed that Whites were more tolerant of ambiguity than both Blacks and Coloureds. These results confirm the criterion-group validity of the AAT scaling procedure and add to the arsenal of validity criteria which have been generated for this

method of measuring tolerance of ambiguity.

The correlations between the indices of ideological beliefs, and emotional ambivalence and attitudinal ambiguity tolerance are reported in Table 5.8. The intercorrelation matrix supports the findings of Study 2. In the liberal atmosphere of the University of Cape Town, White respondents who endorse liberal, anti-authoritarian and non-racist beliefs, expressed lower levels of ambiguity tolerance towards those beliefs than did conservatives. All these correlation coefficients were strong and significant. Similar positive linear relationships were found between authoritarianism and AAT-RWA for the Coloured sample, and between Subtle Racism and AAT-SR for the Black sample. All these relationships plus the non-significant associations between Emotional Ambivalence and authoritarianism are contrary to expectations of Adorno *et al.* (1950).

Table 5.8: Correlation coefficients between authoritarianism and racism and indices of ambivalence and attitudinal ambiguity tolerance.

Measures	Population group					
	Black (N = 14)		White (N = 151)		Coloured (N = 19)	
	RWA	SR	RWA	SR	RWA	SR
AEQ	.47	.00	.14	.11	-.12	.05
AAT-RWA	.12	.20	.41***	.36***	.62*	.15
AAT-SR	.39	.79**	.46***	.64***	.50*	.09

\* $p < .05$ . \*\* $p < .005$ . \*\*\* $p < .0001$ .

Polynomial regression analyses were performed to determine whether significant curvilinear trends existed between tolerance of attitudinal ambiguity towards the RWA and Subtle Racism scales and endorsement of the scales. Due to the restricted sample sizes of the Black and Coloured samples, regression analyses were performed for only the White sample. The polynomial regression analyses proceeded by the hierarchical method recommended by Cohen & Cohen (1983), and roughly followed the three stage model outlined in Study 2 (see pp. 154-155). Both the linear and quadratic effects were significant for the models of AAT-RWA and AAT-SR (see Table 5.3).

Scores on the RWA scale and Subtle Racism scale were related to tolerance of attitudinal ambiguity toward these scales in both a positive linear and negative curvilinear manner. As such, the form of the relationships was curvilinear, but asymmetrical. The linear effect revealed that conservatives were more tolerant of attitudinal ambiguity than liberals. The negative quadratic

effect indicated that the point of inflection was a maximum, and that extreme conservatives were less tolerant of ambiguity than moderate conservatives. The effect sizes for both models was large as anticipated, explaining almost half of the variance in ambiguity tolerance scores.

**Table 5.9:** Regression models for tolerance of attitudinal ambiguity toward the RWA scale and Subtle Racism scale.

Tolerance of ambiguity	Regression results					
	Model	Regressor	$\beta$	$t$	$p$	Partial $R^2$
AAT-RWA	$R^2 = .43$ $F(2, 145) = 53.91$ $p < .0001$	(RWA) <sup>2</sup>	-2.13	-9.04	.0001	.256
		RWA	2.48	9.37	.0001	.171
AAT-SR	$R^2 = .46$ $F(2, 144) = 61.76$ $p < .0001$	SR	1.39	6.38	.0001	.462
		(SR) <sup>2</sup>	-0.78	-3.58	.0005	.048

The relative magnitudes of the partial correlation coefficients of the linear and curvilinear effects for the two models revealed different degrees of asymmetry. The curvilinear effect was stronger than the linear effect for the model of AAT-RWA, while the opposite was true for the model of AAT-SR. These findings suggest that, in comparison to the curvilinear effects, the linear differences between liberals and conservatives was more pronounced for AAT-SR than for AAT-RWA. In contrast, the curvilinear effects were more pronounced for AAT-RWA.

If one accepts that the positive linear relationship between the AAT factors and ideological conservatism originates in conflict associated with deviance from contextual norms, these findings suggest that this conflict is stronger for AAT-SR than AAT-RWA. This interpretation resonates with an *a priori* analysis of institutional norms at the University of Cape Town. Anti-racism is more salient and clearly endorsed than anti-authoritarianism. Indeed, the day-to-day functioning of the university is established upon a quasi-authoritarian structure of submission to authority and conventionalism. Consequently, one expects higher levels of conflict surrounding racist opinions than surrounding authoritarian opinions.

However, these findings beg the question of what accounts for the decrease in ambiguity tolerance from moderate conservatives to extreme conservatives? What, in other words, can explain the significant curvilinear effects? For some reason, extreme conservatives expressed less ambivalence toward their normatively incongruous beliefs than did moderate conservatives. According to the rhetorical-type account proposed here, extreme conservatives should experience

higher levels of ambivalence because of increased disparities between their personal beliefs and institutional norms.<sup>4</sup> Although the data do not provide unambiguous answers to these questions, it is possible that multiple processes underlie these observed relationships. The linear effects could originate in rhetorical dynamics while the curvilinear effects could be attributed to other factors such as authoritarianism. Nonetheless, whatever the explanation for the curvilinear trends, due to the nature of institutional norms, one would expect — as the data has shown — the rhetorical processes to be stronger surrounding racism than authoritarianism.

## Discussion

This study has achieved its aims of replicating the main findings of Study 2 under conditions of anonymity. In contrast to the predictions of the three personality-based theories of the relationship between cognitive style and ideological beliefs, the form of the relationship between tolerance of ambiguity and ideological beliefs varied over content domain. Although the models for AAT-RWA and AAT-SR both included positive linear and negative curvilinear effects, the relative strength of each effect differed over the two models. These findings underscore the necessity to distinguish between different "objects" of ambiguity tolerance as these are differentially related to conservative beliefs.

The shape of the relationship between ambiguity tolerance and ideological beliefs also conflicted with the predictions of the personality-based theories. The positive linear relationships between AAT-SR and Subtle Racism and between AAT-RWA and authoritarianism were exactly opposite to the predictions of Adorno *et al.* (1950) and Sidanius (1984, 1988b; Sidanius & Lau, 1989). While the direction of the curvilinear relationships were in the direction anticipated by extremism theory, they were asymmetrical and do not, therefore, satisfy the predictions of extremism theory. It could, however, be argued that the asymmetry was due to sampling artifact: if more genuine conservatives had been included in the sample, a symmetrical n-shaped relationship would have accrued. Such reasoning rests on the an absolute definition of extremism which appears implausible given the differential strength of the curvilinear effect for the two models. It would imply that there were more extreme authoritarians in the sample than extreme racists. Such reasoning is contradictory since the personality account suggests (and empirical evidence has shown) that extreme authoritarians will also be extreme racists.

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<sup>4</sup> I use the terms "institutional norms" and "personal beliefs" hesitantly. All I wish to mark is the distinction between discourses which an individual may bring to the dialogical space opened in a particular context, and institutionally sanctioned discourses.

It is also unlikely that ideological commitment mediated the relationship between ambiguity tolerance and ideological beliefs. Firstly, the results of Study 2 showed that ideological conservatism was correlated with the political factors of the AAT scale over and above the mediating influence of ideological commitment. Secondly, the linear and curvilinear effects between AAT-RWA and the RWA scale, and between AAT-SR and the Subtle Racism scale were substantially stronger than the relationships between ideological commitment and the RWA and Subtle Racism scales in the previous study.<sup>5</sup> Thus, contrary to the predictions of extremism theory, it is most likely that AAT-RWA and AAT-SR were associated with scores on these scales over and above the influence of ideological commitment.

While both value pluralism theory and a rhetorical theory of cognitive style could explain cross-content variability in cognitive style and the relationship between cognitive style and ideological beliefs, it is highly questionable whether value pluralism theory could account for the present findings. First, with reference to the hypothesized ideological monism of conservative ideology, Tetlock would anticipate conservatives to be less tolerant of ambiguity than moderates and liberals. Second, since both authoritarianism and racism implicate similar conflicting values, it is doubtful whether the value pluralism model would predict differential relationships between scores on these measures and ambiguity tolerance toward them.

As in the previous study, it seems difficult to account for these findings without reference to contextual factors. Rhetorical theory anticipates the positive linear relationship between racist and authoritarian beliefs and ambiguity tolerance toward these beliefs since both sets of beliefs are normatively unacceptable within the institutional context. As such, they are expected to be associated with complex rhetorical strategies and increased tolerance of ambiguity. Also, with reference to the differential degree to which the two sets of belief are censured, rhetorical theory can predict the different strength of the linear trend for each model. Deviant racist beliefs are expected to require stronger and more subtle justification than deviant authoritarian beliefs.

The results of this study corroborate the findings of the previous study and thus affirm the explanatory efficacy of a rhetorical account of ambiguity tolerance. In addition, the study confirmed the validity of the AAT scaling procedure. As hypothesized, Blacks were less ambivalent in their rejection of the Subtle Racism scale than Whites.

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<sup>5</sup> For the White sample in Study 2, Political Interest correlated significantly with the Subtle Racism scale ( $r = -.41$ ,  $df = 149$ ,  $p < .0001$ ), but not the RWA scale ( $r = -.06$ ,  $df = 295$ ,  $p < .26$ ). Religiosity correlated significantly with the RWA scale ( $r = .27$ ,  $df = 298$ ,  $p < .0001$ ), but not the Subtle Racism scale ( $r = .006$ ,  $df = 149$ ,  $p < .95$ ).

## Conclusion

The two studies reported in this chapter have confirmed and elaborated upon the conclusions of Study 1. All three studies have highlighted difficulties with accounts of ambiguity tolerance which are based on universal properties and processes of mind. Just as Study 1 demonstrated that ambiguity tolerance is not generalized across content domain, Studies 2 and 3 have shown an isomorphic relationship between the style and content of cognition to be untenable. These findings pose major challenges to the four psychological theories which have sought to explain the relationship between cognitive style and content. As I have argued, the present findings suggest that the meanings that particular contents have for individuals within a specific context impact on the style with which they are evaluated. Thus, rather than some basic personality dimension finding expression in a particular set of ideological contents, the manifest variability in the relationship between the style and content of cognition across different contents and population groups suggests that new generative structures be sought; generative mechanisms which do not rely on an individualistic, "thing-like" ontology.

However, it could be maintained that the present results have no such implications since they are based on a measure which has been newly developed, and which, furthermore, is not a valid measure of tolerance/intolerance of ambiguity. This argument rests on the contention that intolerance of ambiguity *is* a generalized personality trait — rooted, for example, in a basic closedness to experience — which *will be* manifest over different content domains and contexts.<sup>6</sup> Further, this argument demands that these are the criteria by which construct validity should be evaluated. Against such an argument there is no reply, for the process of definition and validation is circular. Instead, my approach in the work thus far has been to trace the manner in which the construct of intolerance of ambiguity has been "produced" as a generalized personality trait by psychological practice, both in theory (chap. 2) and measurement (chap. 3). My approach to construct validity has been a historical task of investigating the manner in which the construct of intolerance of ambiguity has shifted from being a feature of (what empiricists consider) 'external reality', through the stages of "discovery" and preliminary investigation, to being part of psychological knowledge. Of course, the initial observations and formulations of intolerance of ambiguity were theory bound. It is for this reason that Frenkel-Brunswik's original description of the social and evaluative construct of intolerance of ambiguity was already infused with the language of personality. Nonetheless, to her credit, Frenkel-Brunswik's explicit goal was to *test*

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<sup>6</sup> Such a comment was offered by an anonymous reviewer who evaluated a paper, based on the results of Study 1, which was submitted to the *Personality and Social Psychological Bulletin*.

the personality status of the construct in order to ascertain whether the authoritarian's unambivalent evaluation of social "objects" was part of being intolerant of ambiguity (i.e., a manifestation of an underlying personality trait).

For the reasons detailed in Chapter 4, I consider the AAT scale an appropriate measure of tolerance/intolerance of ambiguity as Frenkel-Brunswik originally described the construct. The scale taps the type of evaluative ambivalence which psychologists have often attributed to authoritarian and prejudiced individuals. However, contrary to Frenkel-Brunswik's theorizing, the present findings suggest that tolerance of ambiguity is not a generalized personality trait. It is not generalized either across different domains of evaluation, or from personality structure to ideological contents in an isomorphic and invariant manner. Before these results could be employed in a critique of trait theory, though, the validity of the AAT scaling procedure as a measure of evaluative ambivalence would need to be established.

The three studies reported above have undertaken a number of validity checks. Firstly, a subscale of the AAT scale was correlated with the Ambivalence scale to establish concurrent validity. Since the Ambivalence scale was modelled after Scott's measure of object ambivalence, the significant association between these measures suggests that, despite measurement error and semantic difficulties with Scott's measure, the two scaling procedures both assess evaluative ambivalence. Second, the difference in AAT mean scores across population groups provide evidence of criterion group validity. The fact that Whites were more ambivalent than Blacks in their evaluation of political and religious authorities in Study 1, and were more ambivalent towards the items of the Subtle Racism scale in Study 3, were expected and were interpreted as supporting the validity of the AAT scaling procedure.

In addition, the data as a whole have an overall coherence which instills confidence in the results. Possibly the most important finding was the manner in which the factor analysis of the AAT scale distinguished so clearly the different domains of authority on the basis of style in which they were evaluated (see Table 4.2). This suggests that ambiguity tolerance scores were meaningfully related to content domain. In addition, the pattern of correlations between the AAT scores and the indices of conservatism is intuitively satisfying since the aspect of conservatism which is most closely associated with each domain of ambiguity tolerance conceptually, was also found to be most strongly related to that domain empirically. In Study 2, for example, ambiguity tolerance of political authorities was most strongly related to racism and authoritarianism for the White sample, while AAT-Rel was most strongly related to Religiosity (See Table 5.6). Similarly, in Study 3, AAT-SR was related to Subtle Racism, while AAT-RWA was related to the RWA scale.



Finally, the counter-intuitive positive linear association between ambiguity tolerance and ideological conservatism within certain (politically conservative) content domains was found to be stable over Study 2 and 3. This was all the more remarkable since, although the same unipolar scaling procedure was used in the two studies, it assessed different types of ambivalence, with different samples — in Study 2 subjects recorded their like-dislike of authorities, while in Study 3 they recorded their agreement-disagreement with attitudinal statements. Overall then, besides the specific validity tests, the entire pattern of results indicated that the unipolar scaling procedure elicited meaningful data.

This has facilitated the interpretation of the results. While one can never be sure whether correlations between personality measures of ambiguity tolerance (e.g., the Budner scale) and ideological conservatism stem from shared scale content, this is not the case with the AAT scale. The AAT scale assesses the style with which social "objects" are evaluated, independently of content. Moreover, as I have argued, the AAT scale generates valid and meaningful data. Consequently, the variability in the form of the relationship between the AAT factors and different indices of conservatism is more readily explicable than variability in the relationship between the Budner factors and conservatism. The former findings clearly indicate cross-content variability in the relationship between cognitive style and content. Furthermore, since ambiguity tolerance toward the different domains of authority was so clearly distinguished, one can approach the interpretation of the findings by considering differences in the meanings that the different domains of authority have for the subjects within the context of the study.

The three studies reported above were conducted to investigate the personality-based account of cognitive style, and the results were thus discussed in terms of the manifest cross-content and cross-cultural variability in ambiguity tolerance. The overwhelming variability in the results have shown the underlying ontology implicit in empiricist psychology — that is, the generalized, stable, and pervasive psychology of the self-contained individual — to be untenable. However, the variation in ambiguity tolerance, both within and between samples, was not purely random, but seemed to be organized in a meaningful pattern. Although the interpretation of the findings takes place in the transitive dimension, there is evidence of underlying generative mechanisms at play. In terms of Bhaskar's dictum, the patterns of variability which were "deliberately produced under conditions [of control]" allowed the identification of "the mode of operation of structures, mechanisms or processes" which were not produced (Bhaskar, 1989b, p. 15). What were not (wholly) produced in the present studies were the findings that (a) the factor structure of AAT scale distinguished clearly between different content domains of authority, (b) each factor of the AAT scale was related to only those dimensions of conservatism with which it is

meaningfully related (e.g., AAT-Pol and racism for the White sample), and (c) different patterns of correlations were manifest across the different population groups.

These findings indicate the presence of underlying generative "structures, mechanisms or processes" which differ from the invariant, atomistic ontology of empiricism. They, however, do not facilitate the identification or operation of these structures. At this stage, though, it seems clear that these are praxis- and concept-dependent, related to the meaningful material and ideological implications that the various cognitive contents had for the respondents within the context of the study.

This conclusion is evident from two striking features of the overall pattern of results. First, the political and religious domains of ideology appear distinct, both descriptively and psychologically. The distinction was evident in both (a) the separate secondary factors of religious and political conservatism (Appendix D), and (b) the independent secondary factors of ambiguity tolerance toward religious and political authorities (Study 1). Thus, not only were religious and political conservatism relatively distinct, but the style of evaluating religious authorities was unrelated to the style of evaluating political authorities. Moreover, the regression models for the religious and political AAT factors indicate that, within the context of the study, there may be psychological differences between these domains. Whereas, AAT-Pol and AAT-cPol were unrelated to ideological commitment, but correlated significantly with ideological conservatism, the opposite holds true for religious authorities. AAT-Rel was unrelated to Religious Conservatism, but associated with Religiosity (see Table 5.6). Unambivalent evaluation of religious authorities was associated with religious commitment, whereas similar evaluation of political authorities was associated with political radicalism-conservatism. This suggests psychological differences between the political and religious domains, with different dynamics underlying ambiguity tolerance. These findings do not, however, indicate that mind, psychology, or personality is somehow divided into independent religious and political dimensions. On the contrary, an anti-universalistic theory would argue that the psychological differences stem from differences between political and religious ideologies — differences related real to praxis- and concept-dependent structures (e.g., operations of power).

Secondly, the results suggest that, within the political field, evaluative ambivalence was related to the degree to which particular contents aroused cognitive conflict within a specific context. This cognitive conflict, however, is not Tetlockian, originating in a decontextualized and monologic attempt by an individual mind to resolve real conflicts in the world. Instead, the conflict is rhetorical (dialogical), arising out of contrary commonplaces or contrary discourses

that structure individual subjectivity in a particular context. Although this is not the only possible interpretation of responses to the AAT scale, the data offers some support for this conclusion. Both the cross-group differences in ambiguity tolerance and cross-content variability in the relationship between ambiguity tolerance and ideological contents are explicable in terms of differences in value conflict experienced by Blacks and Whites, and liberals and conservatives within the context of the study. Blacks were expected to experience less conflict than Whites in rejecting racist opinions and in evaluating political authorities; and liberals were expected to be less ambivalent than conservatives in evaluating conservative political authorities and racist sentiments within the liberal institutional context.

However, since the studies reported here were exploratory, and these interpretations rely on a *post hoc* analysis of cognitive conflict, the nature of the underlying generative structures must at this stage remain tentative. In contrast to the largely critical goals of the previous chapters, the following chapter attempts to make a positive contribution. It proposes a new ontology upon which to base investigations of cognitive style, and reports the results of a qualitative case study which aims to explore the possibility of studying ambiguity tolerance from within this anti-universalistic framework.

## Toward a rhetorical account of intolerance of ambiguity

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*The mind of a person can be understood only by reliving its workings*

(Polanyi, 1967, p. 16)

*Usage however is the surest pilot in speaking, and we should treat language as currency minted with the public stamp*

(Quintillian, *The Institutes of Oratory*, Book 1, v. 4)

In an article which generated widespread and heated debate, Fish (1985) argued that theory can "never succeed" since it assumes a rule-like nature, seeking truth by "adhering to the dictates of an abiding and general rationality" (p. 435); whereas in fact, "it cannot help but borrow its terms and its content from that which it claims to transcend, the mutable world of practice, belief, assumptions, point of view, and so forth" (p. 438). The tension between the universal and particular in theory is an old problem which has emerged on the margins of contemporary psychology, clothed, as elsewhere in the humanities, as a debate between modernism and postmodernism. In contrast to the themes of modernist foundationalism which characterise "mainstream psychology", on its margins, the discipline has responded to recent developments toward an anti-foundationalist philosophy of science and has acknowledged the social and contextual basis of human action.

Accordingly, the discipline has begun to recognise that human psychology operates more like rules-of-thumb than rules. It "cannot be formalized because the conditions of its application vary with the contextual circumstances of an ongoing practice; as those circumstances change, the very meaning of the rule (the instructions it is understood to give) changes too, at least for someone sufficiently inside the practice to be sensitive to its shifting demands" (Fish, 1985, p. 435).

Similarly, human psychology is held to be unformalizable since it is inherently indexical. In stark contrast to the assumption of universalism which underlies empiricist psychology, contemporary models of psychology have recognised the interdependence between psychological "states", "processes", and "properties", and the contexts in which they are experienced/accomplished. Accordingly, the discipline has witnessed a "turn to language" — manifest in the recovery of rhetoric, discourse, and dialogue — as psychologists have attempted to forge an alternative to empiricist universalism (Billig, 1987a, 1991; Edwards & Potter, 1992; Gergen, 1985; Harré, 1983; Henriques *et al.*, 1984; Markovà & Foppa, 1990; Parker, 1989a, 1992; Parker & Burman, 1993; Potter & Wetherell, 1987; Sampson, 1993; Shotter, 1984, 1993a; Wetherell & Potter, 1992).

Depending on how one looks at the matter, though, there appears to be considerable disagreement among contemporary anti-foundationalist approaches. Although various realist and social constructionist philosophies are unified in their criticism of empiricism, constructionism, like realism, may be characterised as "a majority position whose advocates are so divided as to appear a minority" (Leplin, 1984, p. 1). Thus, although Greenwood's (1991, 1992a) realist talk about "objectivity", "accuracy" and "descriptive statements" would seem to differ radically from Bhaskar's critical realism, Shotter's (1993a) social constructionism, Potter and Wetherell's (1987) discursive psychology (which all differ from each other), and the general notion of the theory-bounded nature of observation, all these positions have much of importance in common.<sup>1</sup> First, few (even radical) social constructionists or discourse analysts would deny the reality of "things" in the world which have "an existence independently of our concepts of them and theoretical discourse of them" (Greenwood, 1992a, p. 135; see also Billig, 1994b; Parker, 1992). In McCloskey's (1993) words, realists "need not commence kicking rocks and pounding tables to show [constructionists] that the world is more than socially constructed" (p. 141). Second, from their activity (in criticizing and justifying), it is patently clear that many social constructionists, like realists, do not think that "anything goes" or that there are no criteria by which to evaluate the adequacy/accuracy of theoretical accounts. Nor do they claim that observation, despite its theory boundedness, is useless in this regard (Shotter (1993b) and Billig (1987a) even use experimental findings to exemplify their arguments).

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<sup>1</sup> It seems as though realists and constructionists continually (mis)represent each other in rhetorical moves toward advancing their own position. Potter & Wetherell (1987), for example, argue that "the realist principle" would be undermined if "psychological models of the self reflect not the true nature of the object, as supposed, but our social history" (p. 103). In painting all realists with the same brush, they have forgotten that "all philosophies, cognitive discourses and practical activities presuppose a realism of one kind or another" (Bhaskar, 1989b, p. 2). "The realist principle" to which they refer is empirical realism, which is in fact anti-realist (*ibid*). Realists have behaved similarly (e.g., Harré, 1992a).

I think that Greenwood (1991, 1992b) is correct in claiming that realism, as a general doctrine, is "ontologically neutral" because it makes no commitment to any particular kind of phenomena that exists. Bhaskar reiterates this point by arguing that his realist philosophy may make a vague sketch of what the world must be like for our activities to be rendered intelligible, but that it is up to scientific investigation to "tell us what structures the world contains" (1989b, p. 14). Accordingly, there is wide agreement among realists and social constructionists regarding the falsity of the:

...uniform ontology of empirical realism [which] is an individualism, comprised of atomized units, conjoined (if at all) by contract, passive recipients of a given and self-evident world rather than active agents in a complex, structured and changing one (Bhaskar, 1989b, p. 159).

However, the proposed content of an alternative ontology is under dispute. What is real for some is not real for others. Thus, Greenwood (1991) focuses on personal identity and social dimensions of mind, Parker (1992) on institutional discourses, Shotter (1993a) on conversation, and Billig (1987a, 1993) on argumentation. What makes the matter so complicated is that it is as yet unclear whether these different foci ("reals") are different facets of similar generative structures, or whether the arguments between the disputants betray real differences in ontology.<sup>2</sup>

The issue is complicated further. A second site of controversy concerns the degree to which theorists stress the making or finding of the real — the distinction between structure and agency. What is common to all versions of constructionism and critical realism is a "dialectical emphasis upon *both* our making of, *and* our being made by, our own social realities" (Shotter, 1993a, p. 34, emphasis in original; see also Bhaskar, 1986, 1989a; 1989b; Billig, 1991, Parker, 1992). However, where some authors tend to stress making (agency) (e.g., Billig, 1987a; Potter and Wetherell, 1987; Shotter, 1993a; see Bhaskar, 1993; Bowers, 1988; Reicher, 1988), others stress finding (structure) (Bhaskar, 1986, 1989a; Parker, 1992).

Since this thesis has reacted against empiricist models of cognitive style which have dominated the literature, the discussion will not focus on the various "differences — *of emphasis* — [which] remain" between many schools of (critical) realism and social constructionism (Bhaskar, 1993, p. 187, my (re)emphasis). Instead, this chapter proposes to discuss what a 'rule-of-thumb' conception of cognitive style would be like. In approaching this aim, I will be drawing from a collection of perspectives which propose that the primary psychological reality is "humans in

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<sup>2</sup> The debates between Greenwood (1992a, 1992b) and Shotter (1992), and between Parker (1990a, 1990b) and Potter *et al.* (1990) suggest real differences, while the later reconciliatory tone of Parker & Burman (1993), and collaboration among these authors (e.g., Parker & Shotter, 1990) hints of strong commonalities. Like all in the intransitive realm, the differences between the reals are contextual.

conversation" (Shotter, 1984, 1993a, 1995; Harré, 1983). This focus allows me to draw insights from diverse constructionist and discursive perspectives. For, if conversation is the primary human reality, this does not deny either the rhetorical nature of conversation (Billig, 1987a, 1993), or the constraining and productive effects of institutional discourses (Parker, 1989b, 1992). A second aim of this chapter is to report the results of an empirical study which aimed to investigate the manner in which rules-of-thumb are applied in a rhetorical context.

## **An alternative approach to cognitive style**

### **Ontology**

Fish's distinction between rules and rules-of-thumb is illustrative of the differences between a rhetorical account of cognitive style and the type of accounts offered by the four psychological theories discussed in Chapter 2. These four theories have endorsed an empiricist model of science as they have attempted to uncover universal laws of the properties and processes of individual psychology. Consequently, they have treated psychology as "thing-like" object, knowable by the methods of the natural sciences. This has resulted in their reliance on an asocial, individualistic, monologic, and ahistorical conception of cognition, characteristic of what Harré (1992b) has referred to as the "first cognitive revolution". This model suggests that thinking is applied in a rule-like manner, and it implies that thought is a systematic process which issues from the mind of the self-contained individual, and which deals with all contents in a similar decontextualized manner. Much like the operations of a computer, thinking has been seen as a silent, formal operation of mind (cf. Shotter, 1991a, 1991b). "Being right" when thinking, as when applying rules, results from "adhering to the dictates of an abiding and general rationality" which is formal and mathematical in structure (Fish, 1985, p. 435).

The psychodynamic theories of Adorno *et al.* (1950) and Rokeach (1960), for example, offer accounts of cognitive style in which individuals (unconsciously) apply a particular rule — for example, the authoritarian's Manichean rule: "contradictions are prohibited" — to all cognitive contents and in all circumstances. For Tetlock the rules are more complex since they involve not only subjective processes (i.e., congruency dynamics) but also objective features of the contents under cognition (e.g., the degree of incompatibility between two paths of action). The rules, though, remain formalized and exercised by the individual cognizer/mathematician/scientist as s/he processes the essentially given and stable external contents (see pp. 95-96).

Fish (1985), in contrast, argues that rules-of-thumb are good things to try in particular circumstances, and that "being right" becomes a matter of being in tune with the temporary and shifting norms of the situation. Similarly, the vanguard of the "second cognitive revolution" has suggested that instead of functioning according to the processes and properties of the individual mind, thinking has an inherently social, historical, dialogical, and jointly active nature. These theorists have argued that the rule-like model of cognition is untenable for a number of reasons. On empirical grounds, they have argued that human cognition is not characterized only by rule-following but also by rule breaking and making (Billig, 1987a; Shotter, 1991a, 1991b). Secondly, the cognitivist model encounters a number of theoretical problems. Theories of the rule-like nature of cognition confront major difficulties in explaining (among other problems): (a) how a system of formal rules could ever be flexible enough to account for human development — the "mutuality between the growing organism and its richly structured and changing environment" (Still & Costall, 1991, p. 2); (b) how the individual following a rule knows when to apply the rule — i.e., the infinite regress implicit in proposing rules of using rules;<sup>3</sup> and (c) the nature of the relationship between the meaningful contents of cognition and the abstract and formal rules of cognition — i.e., the two worlds argument (Gergen & Semin, 1990; Lakoff, 1988; Still & Costall, 1991). Finally, there are moral/political difficulties. Self-contained individualism reproduces a set of values and interests which affirms the existing social order (Sampson, 1981, 1983; Shotter, 1991b), and which renders human social accountability "rationally invisible" (Shotter, 1991a).

Instead, theorists of the second cognitive revolution have proposed that thinking, to be properly thoughtful, must operate according to rules-of-thumb which are dialogically negotiated, historical, and applied differentially over context. This means that thinking is not a silent process which operates within the mind of the lone individual. This approach implies more than another theory of mind: it requires a totally new ontology. As Parker notes in his reply to Abrams & Hogg's (1990, p. 219) contention that discourse analysis should "demonstrate its superiority in dealing with the same phenomena that concern social psychologists": "we are not dealing with the 'same phenomena'" (1992, p. 29).

Billig (1987a, 1991, 1993) suggests that the phenomenon with which we are dealing is conversation. He cites the comment by the Eleatic Stranger in Plato's dialogue *The Sophist* to illustrate the object of interest:

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<sup>3</sup> This leads, as in the case of Chomsky's universal grammar, to locating the source of the rules in innate universals (Fish, 1985; Marková, 1991).



Thinking and discourse are the same thing, except that what we call thinking is nothing else than an interior dialogue carried on between the mind and itself, without the accompaniment of vocal utterance (Plato, 1961, p. 218).

Billig interprets this comment literally; thus, "those who wish to study psychological processes should pay attention to the details of conversational interaction,...[for] in revealing the intricacy of conversational manoeuvres, [analysts] are studying directly the processes of thinking" (1993, p. 121). If, as Polanyi (1967) says, "The mind of a person can be understood only by reliving its workings" (p. 16), then cognitive processes must be studied by the analysis of dialogical interaction. This understanding of thinking implies that psychological theories have been misguided in their attempts to identify universal laws of cognition and properties of mind, for processes of thinking emerge from dialogical conversational interaction. According to this conception, thinking is a social practice.

As Billig's reference to sophistic thought suggests, his conception of cognition as a social and dialogical process follows a long and venerable tradition of scholarship. Many arguments have been offered to support the view that, rather than a formal mental operation, thinking is a social process linked to the acquisition and use of language (Bakhtin, 1986; Marková & Foppa, 1990; Shotter, 1993a; Volosinov, 1973, 1987a; Vygotsky, 1978, 1986; Wertsch, 1990; Whorf, 1956). These authors echo the sentiment of the Eleatic Stranger when they propose that thinking is a linguistic process manifest in the use of *inner speech*. In short, these authors argue that "if mental processes are mediated by language, and if language is inherently social, then mental processes are necessarily social in nature" (Wertsch, 1987, p. x). The implications of this account are quite profound, for it opens the study of thought to the study of language (usage). Furthermore, such reasoning allows for the possibility that power relations, institutional discourses, social contexts, and identity may impact on the very nature of thinking. It allows one to reconcile the differences of emphasis that remain between anti-foundationalist psychologies.

This perspective, I will argue, can assist in overcoming some of the central difficulties which have plagued the universalistic models of cognitive style. Of paramount importance, it overcomes the dualism implicit in psychological accounts of cognitive style. Instead of arguing that individuals represent external "objects" in a characteristic manner determined by some mental rules, constructionists have turned from "I think" to "we think" models of cognition (Billig, 1991, 1993; Gergen, 1985; Moscovici, 1983; Sampson, 1981; Shotter, 1984, 1993a, 1993b, 1995). This dissolves the Cartesian distinction between the subject and object of thought, for:

...any locution actually said aloud or written down for intelligible communication (i.e., anything but words merely reposing in a dictionary) is the expression of the product of the social interaction of three participants: the speaker (author), the listener, (reader), and the topic (the who or what) of speech (the hero) (Volosinov, 1987b, p. 105).

If thinking is associated with the use of language, and the use of language is a product of the social interaction of the speaker, audience, and topic, then thinking, too, must be thoroughly dialogical and indexical. The nature of thinking must therefore also be the product of the social interaction between the thinker, audience (context), and contents of cognition. This is the crux of a rhetorical account of cognition (Billig, 1987a, 1993; Billig *et al.*, 1988).

Shotter (1984, 1993a, 1993b, 1995) has usefully described this model of thinking by the term, "joint action". In his attempts to show that the "mental processes 'within us' are similar to the transactions we conduct 'between us'" (1993b, p. 62), he has proposed joint action as "the kind of notion we need, *through* which to see the workings of processes of social construction" (1993a, p. 39, original emphasis). For Shotter, thinking emerges out of the two-way flow of activity between people as they create a "changing sea of moral enablements and constraints, of privileges and entitlements, obligations and sanctions" (*ibid*). The uncertain and changing nature of joint action is characteristic of conversation, because once dialogue is initiated, each interlocutor speaks into spaces created by the other (i.e., responds) and the final outcome of the conversation can never be known in advance. In contrast to the implications of cognitivist rules, processes, and properties of thought, the type of thinking which emerges from joint action produces unintended and unpredictable outcomes as interlocutors/thinkers adjust to the changing "seascapes" which the developing 'situation' produces (cf. Rommetveit, 1990).

Importantly, though, despite the unintended nature of the outcomes of joint action, it has an intentional quality to it as the situations are "related to something other than or beyond itself" (Shotter, 1993a, p. 39). These developing situations have practical-moral constraints (and enablements) lent them from what Parker (1989b, 1992) calls institutional discourses and power relations, or Bakhtin (1981, 1986) would call speech genres. Thus, although joint action is a constructive process in which people flexibly adapt their cognitive strategies (and their representations of 'the real') to a changing and uncertain situation, it employs contents and takes place in contexts which are, to an extent, preformed — "An utterance finds language basically already prepared for use" (Volosinov, 1987a, p. 79; Bakhtin, 1981, 1986). In addition to variability in the contents and style of cognition, therefore, one may expect situations of joint action to exhibit a certain degree of organization and intentionality.

If thinking is associated with the use of language in contexts of joint action, then the characteristics of thinking which have traditionally been understood in terms of personality traits of cognitive style, must be seen as variable and emergent features of social interaction. According to the dialogical unfolding of thought, cognitive style cannot be viewed as the property of

individual psychology, but as a functional and shifting cognitive strategy which changes along with the shifting seascapes of developing 'situations'. In addition to dissolving the subject-object dualism, constructionist perspectives also collapse the distinction between thinking and feeling. "There can be no such thing as an absolutely neutral utterance" because the language which an utterance finds already prepared for use is intentional: speech genres embody and specify moral entablements and constraints, privileges and entitlements, and obligations and sanctions (Bakhtin, 1986, p. 84).

It is here that Billig has made a major contribution to the social constructionist literature. For, by focusing on rhetoric, or the argumentative aspects of conversations, he highlights the persuasive aims of the conversational encounter. Situations of joint action are not characterised only by harmonious interaction as interlocutors collaborate in developing shared systems of meaning, and finding 'true' and consensual representations of the world. Rather, Billig (1987a, 1991; Billig *et al.*, 1988) stresses that (a) the contents of commonsense — the seeds of arguments — are dilemmatic, and (b) the aim of the rhetorical encounter is persuasion, as the joint actors attempt to 'move' one another. Thus, thinking is not merely a formal mental process in which one person imparts knowledge which another did not originally know. Instead, it is a reflexive process whereby participants attempt to 'move' each other, "in the sense of morally re-positioning [them] in relation to [their] own situation" (Shotter, 1993a, p. 123). Likewise, Shotter follows Vygotsky in arguing for a interrelation between intellect and affect, for if they are separated, "the door is closed on the issue of the causation and origin of our thoughts" (Vygotsky, 1986, p. 10; Bakhtin, 1986). To illustrate the affective origins and effects of thinking, Shotter (1993a) shows how statements like "use your head, can't you, use your head, you're on earth, there's no cure for that", impart no new knowledge, but function only to 'move' an audience in relation to their own situation.<sup>4</sup>

Unlike Tetlock's conception of cognitive style as cognitive response to the (real) dilemmatic complexity of the issues under cognition, the complexity of the situation is seen here as a construction. If the contents of all thought are inherently dilemmatic as Billig contends, then the same issue can be presented in a monistic or pluralistic manner, depending on the nature of the (developing) situation. Therefore, instead of proposing universal laws of cognitive functioning, "what has to be accounted for are the moment by moment changes, this way and that, as the

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<sup>4</sup> I do not discuss the origins of the affective tendencies related to the "causation and origin of our thoughts". A full account of why these should be located in the productive and constraining effects of institutional discourses rather than properties of mind is beyond the scope of this discussion (but see Foucault, 1978, 1982; Parker, 1989b, 1992).

process develops" (Shotter, 1987, p. 239). This new ontology, therefore, has methodological repercussions. Experimentation, for instance, is automatically excluded.

## **Methodology**

In concluding his provocative paper, Danziger (1985) suggests that a "fundamental theoretical change would surely depend on a fundamental change in methodology" (p. 10). This is true since an institutionalized methodology will incorporate an ontology which cannot be tested or questioned by a mere application of the method. As this thesis has argued, measures which allocate each individual in a sample a single ambiguity tolerance score to represent their characteristic cognitive style, assume that tolerance of ambiguity is a generalized, pervasive, and asocial personality trait. Theoretical change is dependent upon methods which allow a fair test of this ontological assumption. The Attitudinal Ambiguity Tolerance scale has been useful for this purpose as it allows one to examine the generality of ambiguity tolerance over varying contents.

This, however, does certainly not constitute a fundamental theoretical change. A number of ontological assumptions associated with empiricist science remain. Firstly, the AAT scale yields quantitative data which assume the properties of an interval measurement scale. The structure of this numerical system will thus be automatically reflected in the theory of intolerance of ambiguity; suggesting, perhaps, that the important features of ambiguity tolerance lie in the relative amount an individual displays toward a particular content domain. An array of other potentially theoretically salient features of ambiguity tolerance, such as its functions and effects (Edelman, 1977), its structural foundation in institutions (Merton, 1976), its historical association with particular ideologies (Billig, 1982; Weigert, 1991), or its psychodynamic structure, are thus disregarded. Secondly, the AAT scale tends to reify ambiguity tolerance. While the scale does not presume ambiguity tolerance to be a generalized personality trait, a 'second order' reification is evident in references to attitudinal ambiguity tolerance toward political, religious, and familial authorities — as if such (natural) entities existed. In fact, these different factors of attitudinal ambiguity tolerance were produced (in part) through methodological procedures of sampling, item selection, factor analysis, etcetera. If the AAT scale had included different contents — for example, only religious authorities — different factors would have emerged. Perhaps, as in the preliminary factor analysis reported in Chapter 4, christian authorities would have been distinguished from non-christian authorities. Moreover, the nature of the factors would vary across context, with christian and non-christian authorities perhaps being more clearly differentiated if the study were to be performed in an orthodox religious context.

Armed with these remaining empiricist assumptions, a diligent researcher would not rest, content after demonstrating individual variability in ambiguity tolerance, but would proceed to construct and test theoretical models of the conditions when authoritarians, for example, are expected to be tolerant or intolerant of ambiguity towards particular contents. Such models could rely on constructs such as context, content, norms, deviance, etcetera. In other words, the AAT scale may be appropriated by universalistic theory in an effort to generate laws of psychological functioning. Nothing, to my mind, would be more futile for context and content would be reified as "situation" and "attitude"; and, as in Tetlock's case, the theory would again reduce to individualism (cf. Parker, 1990b; Sampson, 1981; see also pp. 91-93).

Why then, it may be asked, has this thesis delved so deeply into the positivist honey jar of valid and reliable quantitative measurement and fine tuned techniques of data analysis if these cannot assist in its aims of fundamental theoretical change? The reasons for this focus are rhetorical, and are specific to the nature of the literature under consideration.

Within the discipline of psychology the study of authoritarianism has been undertaken by two groups of researchers with conflicting theoretical and methodological frameworks. The first group is characterized by their reliance on quantification and universal theorizing, based on the notion of a psychological typology. Stone *et al*'s (1993) recently published, *Strength and Weakness: The Authoritarian Personality Today* is typical of this approach. Sidanius and Tetlock are recognized as having made important theoretical contributions with their highly individualistic work, and Altemeyer's universal definition of authoritarianism is cited with approval.<sup>5</sup> It shows no recognition of social constructionist thought which has swept through the discipline of social psychology in response to the "crisis", and barely acknowledges the two decades of work that Michael Billig, for example, has devoted to the study of fascism, prejudice, and authoritarianism. Instead, the generalized personality is revived with Roger Brown's (1965) old trope, "Do you know him (*sic*) — the Authoritarian, the Antidemocrat, the Pre-Fascist...", and an attempt is made to establish the global validity of the F scale as a measure of this type. In other words, the authoritarian is accepted as a type, with a characteristic cognitive style and a penchant for fascist ideology.

This approach, however, receives little respect from some philosophers, political scientists, and social critics who regard the traits measured by the F scale as "'pop' psychology [which] finds little or no place in the more sophisticated analysis of fascist ideology" (Eatwell, 1989a, p. 41).

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<sup>5</sup> See p. 26 for a discussion of Altemeyer's definition of authoritarianism.

Billig is representative of a second school which rejects the primacy of quantification and theoretical universalism in the study of ideology. The aim of the present work is to bridge the divide, and stimulate a dialogue between these two schools of thought. If the work had focused purely on a social constructionist account of ambiguity tolerance, it may have been accused of throwing the baby out with the bath water (cf. Abrams & Hogg, 1990). Instead, an attempt has been made, first to demonstrate the implausibility of the notion of a generalized trait of ambiguity tolerance, using a quantitative method, and then to build upon this conclusion by developing an account of ambiguity tolerance with social constructionist insights. As such, the thesis has been an exercise in ambiguity tolerance — it is an argument woven between two conflicting schools with the aim of stimulating dialogue between them.

To achieve fundamental theoretical change, though, fundamental methodological change is required. This chapter aims to break completely with a quantitative, empiricist methodology and, instead, employ a qualitative method, which focuses on language, rather than the individual, as the object of analysis. It is not merely a matter of selecting one method over another in the marketplace of methods. Rather, a methodological shift is necessary in order to repudiate the "fantasized real" object of psychological inquiry (Parker, 1992), and "to take seriously the proposition that mental states are themselves socially created" (Billig, 1991, p. 14). In the study which follows, then, intolerance of ambiguity will not be regarded as a 'real' property of psychology, but as (a) a rhetorical strategy which is an emergent feature of joint action, and (b) a socially constructed attribute which is used in talk to achieve certain effects.

Investigating cognitive style through the study of language usage is by no means a novel approach. It is significant that Frenkel-Brunswik (1948) originally identified tolerance/intolerance of ambiguity in the talk of prejudiced and non-prejudiced children. However, for political and scientific reasons, these expressions of ambiguity tolerance were 'seen through' a theory of individual differences (Durrheim, *in press/a*). Tetlock's attempts to code talk by means of the integrative complexity coding schedule is similarly theory bound. He sees talk not as a conversational or argumentative encounter, but in terms of individual information processing. By analyzing only the talk of their subjects, Frenkel-Brunswik and Tetlock disregard the dialogical and indexical nature of talk, treat talk as the product of the self-contained individual, and thereby, reproduce the notion that thinking is a monologic individual mental function. Moreover, their tendency to employ "gross categorization" — of people (Frenkel-Brunswik) and excerpts of speech (Tetlock) — leads to a suppression of variability (cf. Potter & Wetherell, 1987). These approaches cannot satisfy the requirements of a conversational ontology for we need a method which 'fits in' with the nature of thinking rather than the requirements and practices of the empiricist science.

The approach which is adopted here focuses on the deployment and effects of talk within a dialogical argumentative context. This places the discussion of intolerance of ambiguity squarely within the tradition of discourse analysis (Edwards & Potter, 1992; Potter & Wetherell, 1987; Parker, 1992; Parker & Burman, 1993; Wetherell & Potter, 1992). Instead of treating 'intolerance of ambiguity' as a term describing a property of psychology, it is viewed as performative (cf. Austin, 1962), and the focus shifts to the crucial role that language plays in constructing objects and (re)producing social consciousness (Billig, 1991; Henriques *et al.*, 1984; Parker, 1992; Wetherell & Potter, 1992).

This approach to 'tolerance of ambiguity' is well illustrated by Murray Edelman's (1977) analysis of political language. Edelman analyzes the effects of language usage when he argues that ambiguity in talk can be used as a political strategy. For Edelman, the strategic use of ambiguity is revealed when:

The FBI tells us repeatedly both that crime is increasing and that the FBI has never been more effective in coping with it. (Edelman, 1977, p. 4).

Edelman brackets off questions about whether such statements are accurate reflections of the real state of affairs (i.e., whether crime is actually increasing), or reflections of the psychological attributes of the speaker. Instead, he analyses the functions of talk, including such ambiguous statements which simultaneously excite and mollify fears. These, he argues, allow leaders to gain followings as "people are induced to accept sacrifices and remain susceptible to appeals for support" (Edelman, 1977, p. 5). For Edelman, language is "not simply an instrument for describing events but is itself a part of events, shaping their meaning, and helping to shape the political roles officials and the general public play" (Edelman, 1977, p. 4). Thus, ambivalent opinions regarding the role of the FBI in crime prevention extend beyond the psychological make-up of the American citizen.

By analyzing the different effects which speakers achieve in shifting contexts, Potter & Wetherell (1987) have shown a thoroughgoing variability in the attitudinal content that individuals espouse. Similarly, in the study which follows, I aim to demonstrate that with the changing demands of a developing argumentative encounter, individuals will manifest thoroughgoing variability in cognitive style. In achieving this aim, I will draw heavily on Billig's rhetorical psychology, which has emphasized the rhetorical nature of the structure of thought and attitudes (Billig, 1985a, 1987a, 1991, 1993; Billig *et al.*, 1988). Billig has, however, been concerned mainly with the general proposition that attitudinal style is complex and contradictory (Billig, 1988a, 1988b, 1989b, Billig *et al.*, 1988; Potter & Wetherell, 1988). In addition to explaining variability in attitudinal content (i.e., attitudinal complexity), though, rhetorical theory may also be useful in

explaining variability in ambiguity tolerance (i.e., stylistic complexity). Accordingly, this chapter aims to offer an "instructive account" (Shotter, 1993a) of variability in ambiguity tolerance by analyzing the strategic use of two rhetorical processes — categorization and particularization — in an argumentative context. It will be argued that shifts between tolerance and intolerance of ambiguity are a basic feature of argumentation and, therefore, also a basic feature of all thought.

Once individual variability in ambiguity tolerance has been established and set within a rhetorical framework, a second set of interests arise: what functions do talk of 'tolerance/intolerance of ambiguity' serve in discourse? Statements such as "fascists are intolerant of ambiguity" and "liberals are tolerant of ambiguity" have played important roles in criticising and legitimating systems of ideological beliefs, both within and outside of psychology. Similar terms used by the general public include speaking 'double talk', or with a 'forked tongue', or being 'wolves in sheep clothing', etcetera. Despite their importance in criticism and justification, these terms have been of little concern to psychologists. The second aim of this chapter, therefore, is to focus on 'tolerance of ambiguity' as an object, in an attempt to explore further the relationship between fascism and intolerance of ambiguity.

## **A case study: Peace and violence on the new South African Right**

The assassination in 1993 of Chris Hani, the leader of the South African Communist Party and commander-in-chief of *Umkonto we Sizwe*, was one of those political events which draw people unequivocally into radically opposing camps. For this particular event, the emergent boundaries separated the vast majority of South Africans, who deplored the murder and mourned the loss of a national hero, from the radical and extreme Right. The assassination spawned widespread civil unrest as (predominantly Black) South Africans took to the streets to demonstrate their outrage against the right-wing perpetrators of this violence and the apartheid regime in general.

Against the overwhelming weight of mass opinion, some voices on the Right undertook the difficult task of justifying this ignominious deed. A detailed analysis of one such argument will be presented here. The text consists of an interview with Koos Vermeulen, leader of The World Apartheid Movement (WAM), a small but vocal South African neo-fascist organization.<sup>6</sup>

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<sup>6</sup> During 1993 WAM renamed itself, The World Preservatist Movement, in order to accommodate Black members! Throughout this chapter the organization will be referred to as WAM.



Throughout this interview, which was broadcast on public television soon after the assassination (25 April 1993), Vermeulen attempts to justify his organization's support for the Polish immigrant, Janus Waluz, the assassin.

This exchange between the interviewer and Vermeulen is significant for a number of theoretical reasons. Firstly, it took the form of an argument. While it is generally accepted that unpopular positions must be justified by argument, this is not clearly anticipated by psychological theories of personality and ideology. On the contrary, such theories emphasize the non-debatable dogmatism of persons participating in extremist ideological movements. While personality theory may anticipate argument and possible attitude change from uncommitted members of the general public (as those studied chapters 4 & 5), ideologues and "true believers" of the fascist fringe are precisely those individuals who should manifest the full-blown syndrome of authoritarianism, and are expected to be dogmatic, closed minded, and intolerant of ambiguity (Adorno *et al.*, 1950; Converse, 1964; Rokeach, 1960; Shils, 1958). Such individuals are predicted to be impervious to attitude change and argumentation because their cognitive style is such that it consistently rejects attempts to question its Manichean categorizations.

Theories of the ideological roots of cognitive style, such as that proposed by Tetlock, paint a similar picture of fascist rhetoric. While Tetlock (on occasions) rejects the idea that some underlying personality dynamic is responsible for the characteristic dogmatic style of the extreme Right, he does not reject the notion of a characteristic style (see Tetlock, 1993; Tetlock *et al.*, 1993). Instead of personality, though, Tetlock proposes that the monistic style of fascist ideology produces categorical thinking among its adherents, by means of which they may reduce conflict between two contradictory values or rhetorical positions. Thus, Tetlock (1993) qualifies his value conflict theory of individual variability by arguing that:

Conservatives, with their presumably more internally consistent value systems are relatively unaffected by shifts in political role. There is less potential value conflict that they can be forced to confront (p. 398).

Fascists should not display variability in cognitive style, even under "force".

While the definition of fascism is highly disputed (Billig, 1977), there can be little doubt that WAM falls under the rubric, 'fascist' (van Rooyen, 1994). As can be seen from the interview transcript (see Appendix F), the organization is characterized by an ideology of White nationalism, it is extremely anti-Marxist and anti-communist, and is anti-democratic in its attempts to preserve a White South Africa (cf. Billig 1989a). In addition, the organization is reported to have worldwide neo-Nazi links (Wilkinson, 1993). Thus, following traditional psychological theories of personality and ideology, one would anticipate Vermeulen to employ

a consistently dogmatic defence of his activities, which precludes the possibility of argument.

The second feature of the interview which makes it theoretically interesting is that, in three instances, ambiguity tolerance is referred to as a topic of discussion. In speaking about 'double talk', Vermeulen employs an equivalent of what psychologists call 'tolerance of ambiguity'. The essence of both terms lies in their reference to an ambiguous cognitive style which accommodates both a category and particular instances or other categories which contradict the quintessence of the category. As used in the interview, 'double talk' is similar to Frenkel-Brunswik's description of ambiguity tolerance (see pp. 66-67), for it refers to an individual's ambivalent evaluation of a single social "object". Not only does Vermeulen display flexible rhetorical skills, but, in talking about 'double talk', he demonstrates skills in psychological theorizing of his own. Thus, besides being patently incorrect, ignoring the powerful and thoughtful rhetorical dexterity of the extreme Right is politically dangerous for it neglects the persuasive potential of fascist rhetoric. This chapter works toward a rhetorical account of cognitive style which allows a theory of right-wing extremism to accommodate its empirical reality.

The third point of theoretical interest concerns the content of the argument. In backing the assassin, Vermeulen is taking a stance in support of violence as a political strategy. Indeed, WAM is renowned for its support of right-wing violence. The organization has assisted the mass murder Barend Strydom in his efforts to secure indemnity, and have claimed the notorious "Vaal Monster" as a member of their organization (Makoe & SAPA, 1993). In addition, WAM train their members in military techniques and "self-defence" (Laufer, 1993), and have been suspected of planning to use chemical weapons to kill large numbers of Blacks (Staff Reporter, *Rapport*, 1990). If a Rokeachian value analysis were to be undertaken, it would no doubt be found that violence would rate quite prominently in the rhetoric of the organization. If this is true, though, it is also true that peace is a hallowed value of movement. Vermeulen always goes to great lengths to communicate his desire for peace — "really, deep in my heart I take the peace option before war" (lines 160-161 of the transcript).

In other words, Vermeulen values both peace and violence. According to Tetlock, his allegiances to a fascist organization would allow him to bolster the import of the one value and minimize the significance of the other in an attempt to reach decisions for action which may be logically reconciled with neo-fascist ideology. Thus, in debating the moral status of the assassination, the value of peace will be minimized while the value of violence is bolstered. While such monism may serve the psychological functions outlined by Abelson (1959), it is certainly not rhetorically effective as it suggests an irrational dogmatism. In contrast, a theory of rhetoric suggests that in

argumentation and controversy, "the basic notions of morality and philosophy...are not univocal and have no fixed meaning" (Perelman & Olbrechts-Tyteca, 1969, p. 132; see also Fish, 1994). Billig (1987a) cites Protagoras in this regard: "Of all things man is the measure" (p. 42). Instead of taking peace and violence at face value and bolstering one in favour of the other, the rhetorical perspective would expect peace and violence to be debated and (re)constructed throughout the discussion, even by fascist supporters (cf. Cochrane & Billig, 1984).

In contrast to psychological conceptions of "terminal values" which may be invoked to sustain an argument or justify an action, a rhetorical account treats values as complex meanings which are continually being reshaped. This conception of values is discussed with insight by the anthropologist Brad Shore, who argues for a notion of:

...complexity and variation [in values] existing not only within a given culture but also within individuals for whom ethics is realized more commonly as dilemmas than as the simple mobilization of values (Shore, 1990, p. 168).

Accordingly, the condition which makes possible the complexity and variation in the construction of values, is their dilemmatic ontology — "there are two sides to every question" (Billig, 1987a, p. 5).

## **Contrary themes: Peace and violence**

The dilemmatic nature of commonsense is central to Billig's rhetorical account of cognition. Billig (1987a, 1991; Billig *et al.*, 1988) argues that this dilemmatic ontology is manifest in contradictory commonplaces such as "many hands make light work" and "too many cooks spoil the broth", which exist not merely as external beliefs from which an individual may choose one or another, but as "contrary thoughts [which] may find their homes within the same mental spaces" (Billig, 1987a, p. 191). Contrary themes make thinking possible for they provide the conditions whereby people may puzzle over their world; deliberating, for example, whether a particular task should avoid too many cooks or should commission many hands. The contrary themes of commonsense are thus seen as the basic units of thought. This being the case, a first task, before examining the style of thinking manifest in particular utterances, is to discuss the nature of the contrary themes which provide the seeds for argumentation, and thereby, thinking.

By highlighting commonsense, rhetorical psychology proposes a truly social understanding of cognition. Quite simply, the contents of thought are not seen as individual inventions, issuing from the head of the speaker, but as socially shared 'property' — Bakhtinian "bodies of meaning" — which are encoded in language, shared by speaker and audience alike, and 'drawn upon' and

(re)produced in particular contexts (Bakhtin, 1981, 1986; Billig, 1991; Volosinov, 1973, 1987a). Like American attitudes toward the FBI, the contents of all thinking and deliberation are not reducible to the thought processes or psychology of the individual, as psychological theories of attitudes have suggested (e.g., Adorno *et al.*, 1950; Wilson, 1973). Contrary themes of commonsense, the basic units of thought and the units of rhetorical analysis, are thoroughly social in nature.

This has a number of implications which distinguish a rhetorical account of cognition from individualistic theories. First, rhetorical psychology requires an understanding of the socially shared ideological contents which structure the dilemmas underlying argumentation within specific historico-cultural contexts. In his account of prejudice, Billig (1988a), for instance, argues that the Enlightenment ushered in an age which simultaneously proclaimed and negated the value of tolerance: it heralded the age of 'liberty, equality, and fraternity', and witnessed also the rise of the nation-state. It is not that the *ancien regime* also did not value both tolerance and intolerance, but that the specific contents, the nature of what constituted tolerance and intolerance, were transformed. In particular, the irrational intolerance associated with the Church was rejected in favour of scientifically justified intolerance, based on reasoned judgement.

Rhetorical theory emphasizes an analysis of the content of the contrary themes of common-sense in order to understand the meaning of argument. Billig's analysis helps us to understand the nature of contemporary racist thinking. The argumentative nature of the disclaimer, "I'm not prejudiced, but...", suggests that it is not as a reflection of a tolerant personality, or an argument against intolerance *per se*, but a position against irrational intolerance not based on reasoned judgement (Billig, 1988a; van Dijk, 1992). In order to deflect criticism and to lay claim to the "moral community of the unprejudiced", racial intolerance is often sustained by seemingly enlightened, reasoned repertoires such as ecologism (cf. Dixon *et al.*, 1994), and is characterized by denials of racism. Accordingly, Billig argues that the dilemmatic opposition between the tolerant and intolerant themes which frame thinking on race, comes into particular relief during the Enlightenment, and are 'resolved' in ways typical to the context. A rhetorical analysis must begin by detailing the content of the contrary themes of commonsense, and the shared forms of "conflict resolution".

Like our understanding of 'prejudice', the meanings attached to 'peace' and 'violence' have been moulded by Enlightenment ideas. Georges Sorel, the French syndicalist philosopher, has suggested that the Enlightenment introduced radical changes to common understandings of 'violence'. He argues that the rejection of "old brutalities" of *ancien regime* passed onto the idea

that "all violence is an evil" (1915, p. 219). This massive change in the meaning of violence was reflected in (a) child rearing practices which rejected the severity of clerical punishments, (b) the penal code where brutality came to be seen as abnormal, and (c) the impossibility of reconciling the violent political functions of the old "politico-criminal" associations with rational democracy. At the heart of these changes was the shift away from the absolute authority of the church and sovereign, to a secular, democratic, and humanist age (see also Foucault, 1977). Along with the Enlightenment themes of tolerance, violence had come to be seen as irrational, abnormal, and criminal.

The rejection of violence as a legitimate political strategy is evident also among the contemporary 'new South African' Right, a group which psychologists would portray as having a penchant for displacing repressed aggression. Reacting to the right-wing bombings on the eve of the first democratic election in South Africa, the Hoopstad Freedom Front chairman, sergeant-major Obie du Plessis, captures the nature of this violence.

I call them Klipdrift soldiers — they get drunk and then go around trying to be soldiers. They are fighting a war of cowards and we are not sympathetic to their cause. It is wrong to kill innocent people (cited by Vermeulen, 1994).

Here, right-wing perpetrators of violence are condemned for being irrational and immoral (but not criminal) by one of their fellows. They are Klipdrift soldiers — acting under the influence of cheap liquor — who are cowardly killing innocent people. It is remarkable that on the symbolic twilight of right-wing power, where resistance is to be anticipated in the form of aggression displaced onto a 'legitimate' enemy, violence is rejected in such strong terms.

This, however, does not mean that peace has become the sole value of modern society, and that all deliberation is forgone in favour of unanimous and univalent calls for peaceful activity. On the contrary, if the Enlightenment rejected violence, it also sanctioned it in appropriate circumstances. The modern age has been characterized by state repression, and national and civil wars on a scale not known before. Indeed, Sorel's own work constituted a defense of proletarian violence, "enlightened by the idea of the general strike" (p. 295). Against the calls for peace made by the parliamentary socialists, Sorel promoted the "high ethical values of working class violence, heroism and authenticity, by means of which [socialism] brings salvation to the modern world" (*ibid*). While himself rejecting the brutalities of the *ancien regime* and its associated "religious dogma", Sorel deemed violence necessary for the ultimate good of the modern world. Modern violence cannot be sustained by irrational dogmas, but by the protection of the good of the people: the proletariat for the Left, and the nation-state for the Right.

From the rhetorical perspective these contrary themes of commonsense are to be expected. What

an analysis of the content of commonsense suggests is that violence cannot be advocated in the simple-minded and dogmatic manner expected of the authoritarian. Instead, violence must be justified in argument. In order to be heard and be persuasive, the advocates of violence must be seen to be doing good rather than evil, and acting rationally rather than irrationally. Rhetorical analysis thus attempts to make explicit the boundaries of 'peace' and 'violence' — the borders between good and evil, and reason and unreason. In so doing, the analyst is not seeking metaphysical boundaries, but analyzing the culturally specific margins which are employed in criticism and justification.

Even in assertions which explicitly reject certain themes, there are to be found implicit themes which signal the possible contours of boundaries (Billig, 1988b, 1988c). While it may be "wrong to kill innocent people", as the sergeant-major says, it may be perfectly legitimate to kill people who are not innocent. In such instances, violence may be justified by explaining the non-innocence of the people to be killed. These implicit themes make possible variation in attitudes as they offer rhetorical means by which to sustain a particular course of action. A little later, sergeant-major Obie du Plessis, for example, suggests that attempts by the new government to disarm the farmers, "most of whom fought in the Angolan and Namibian campaigns", could trigger a "10 or 20 year long civil war that would make the war in Bosnia look insignificant" (cited by Vermeulen, 1994). Here violence is a legitimate course of action since the targets of violence are not innocent people, but wilful aggressors (against the *volk*). Violence is simply a means of self-defence.

This argument implies that the threshold where modern violence may become peace-loving, is in the defence of a people or political arrangement. The specific boundaries between peace and violence in the context of this utterance is the disarming of the farmers. This cannot be an innocent undertaking since it undermines the right-wing conception of the *volk* (cf. van Rooyen, 1994).<sup>7</sup> Once change threatens the Afrikaner way of life, one might anticipate resistance from 'real soldiers', for a 'just cause', in a 'legitimate' and terrible war. Violence, like prejudice, is something to be found in the other. When it is practised, it is not immoral brutality but a means of defence, undertaken for the good of the nation, in the name of peace.

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<sup>7</sup> The reference to armed farmers captures the essence of the right-wing conception of Afrikaner identity. Eugene Terreblanche, the leader of the extremist group, the *Afrikaner Weerstandsbeweging* [Afrikaner Resistance Movement], for example, describes himself as *'n boer en 'n jagter* [a farmer and a hunter]. This is also captured in the (now banned) resistance chant of *Umkonktho we Sizwe* (the armed wing of the ANC): "Kill the boer, kill the farmer".

According to Billig, contrary themes provide the seeds for deliberation and argumentation (Billig, 1987a, 1991; Billig *et al.*, 1988). Just as implicit themes may indicate the presence of contrary attitudinal positions and open the possibility for attitudinal variability, they also provide the basis for deliberation and variability within an ideological tradition such as the extreme Right in South Africa. Perelman and Olbrechts-Tyteca (1969) have suggested that the most general values, like non-violence, which embrace a large sphere of applicability, often become obscure in novel situations since their meaning depends on the system in which they are used. Thus, with the arrival of the new South Africa, the Right had to decide between the commonplaces of non-violence and defence of national identity.<sup>8</sup> This becomes a matter of the 'true' interpretation of the nature of the changes; a matter of the rhetoric of essences. Are the changes such that identity is threatened by the enemy, or will change leave intact the essence of Afrikaner identity?

Following Billig, one may argue that the conflict between violence and non-violence "is not merely the conflict between the individual and extraneous social customs (or perhaps other people), but a conflict within individuals who have two contrasting ideological themes upon which to draw" (1991, p. 127). This conflict is also manifest within an ideological tradition such as the South African Right, who, with the onset of change has split into numerous groups as they have begun to (re)define their essence (cf. Welsh, 1989).

The social nature of thinking is thus reflected in the socio-historical nature of the content of the contrary themes which are employed in specific rhetorical contexts. There is a second implication of using argumentation as a metaphor for thought: it informs an account of the form or style of thinking. This is the focus of the remainder of the chapter, for here we are concerned with variation in style rather than variation in content.

A rhetorical account of thinking requires an alternative to Tetlock's conception of values and value conflict (see pp. 93-97). There can be no conflict resolution or belief congruity as such because there exists no core or terminal set of values which is not counterbalanced by other, contrary values. No amount of cognitive differentiation and integration, seeking and weighing implications, will be able to resolve this conflict in any formal sense (such as finding the correct answer to a dilemma). Instead, a rhetorical account expects to find people (re)constructing values in specific contexts as, by a reflexive and dialogical process, they seek to persuade an audience. The social nature of thinking suggests that contrary themes may always be aroused when a course

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<sup>8</sup> Paradox abounds, and there is much leeway for argumentation, as the Right criticize "communist terrorists" but justify their own armed resistance.

of action or belief is challenged. In such situations, there is no alternative to using complex, but readily accessible, rhetorical strategies. Cognitive style, therefore, can never be viewed as a property of individual psychology, for the manner in which value conflict is both generated and resolved is inherently social. Contrary themes, being the seeds of argument, are also the seeds of complex cognitive styles.

### **Contrary themes and tolerance/intolerance of ambiguity**

If values are not unitary commodities which are possessed by communities, but instead, if values are realized as dilemmas, then thinking about values must involve means by which the inevitable conflict between opposing commonplaces is handled or managed. It is here that rhetorical insights inform a theory of cognitive style. For, the way in which individuals manage value dilemmas in their private thinking will be similar to the manner in which they debate the same dilemmas in developing dialogical contexts of joint action. If arguing is thinking, then ideological dilemmas will be managed by rhetorical means.

The study of rhetoric is well equipped for studying value conflict resolution since it has emphasized the creative and flexible strategies which people employ in the art of persuasion. Billig (1987a) borrows Ralf Lever's splendid term *witcraft* to capture the inventive way in which we think and argue our way 'out of' (about) dilemmatic situations. Unlike logical reasoning, which aims for correct, formal deductions and conclusions, matters of rhetoric are never unarguably right or wrong. Instead, as discourse theorists have proposed, "seeking the available means of persuasion" around a particular issue involves a reflexive process where participants draw on different discourses in order to frame an object in a particular way (Potter & Wetherell, 1987; Parker, 1992; Wetherell & Potter, 1992). As Foucault (1972) writes, "discourses are practices which systematically form the objects of which they speak" (p. 49). Hence, the object, 'violence', may be viewed as either honourable or despicable, depending on whether it is framed in terms of self-defence or murder.

The reflexive process of *witcraft* entails locating essences. When arguing in support of, or in opposition to violence, for example, the essence of violence must be sought either in a discourse of self-defence or murder. Such rhetoric does not involve the manipulation of formal argumentative structures, but is essentially an endless exercise, where examples supporting one conclusion may be countered with examples supporting the converse (Aristotle, 1932; Billig, 1987a; Perelman & Olbrechts-Tyteca, 1969). Essences should therefore not be thought of in a



Platonic sense, "as objects lying behind the objects of everyday experience", but rather as "the fittest way of talking and thinking about these objects" (Billig, 1987a, p. 138).

Billig (1987a) explains that finding essences, or the fittest ways of talking about objects such as violence, involves the rhetorical processes of locating these objects in specific categories, and extracting them from these categories and placing them in others. A particular instance of violence must, for example, be placed in the category 'murder of innocent people' or 'heroic self-defence'. By developing accounts of the manner in which categories and particulars are used in talk, rhetorical psychology may contribute to an understanding of "conflict resolution" and tolerance/intolerance of ambiguity. From its original formulation, tolerance versus intolerance of ambiguity has been defined in terms of categorization, with a Manichean, black-white cognitive style characterizing rigidity and intolerance of ambiguity. Witcraft is thus central to an understanding of cognitive style since the location of essences involves the defining features of intolerance/tolerance of ambiguity — namely, intolerant categorization, treating two or more distinguishable objects or events as equivalent, and tolerant particularization, extracting a particular from a category in which it had previously been placed (Billig, 1987a).

The fact that the rhetorical processes of categorization and particularization are central to the definition of tolerance/intolerance of ambiguity may be ascertained from the original definition of authoritarianism. An authoritarian cognitive structure was characterized as:

...simple, firm, [and] often stereotypical...[where] there is no place for ambivalence or ambiguities. Every attempt is made to eliminate them (Adorno *et al.*, 1950, p. 480).

The prejudiced individual was also said to use categorical statements which rule out exceptions, and being intolerant of ambiguity, s/he is presumed to believe that fundamental differences exist between all instances of different categories (Billig, 1985a). Thus, according to personality theory, authoritarian and prejudiced thinking would not be characterized by witcraft, since it would draw only on pre-formed essences and would not be capable of extracting objects from categories and locating them in new ones. Moreover, to the extent to which the prejudiced individual believes in fundamental differences between Blacks and Whites, this characteristic non-reflexive thought is said to extend to all categories including 'peace' and 'violence'.

On the other hand, it has been suggested that the thinking of the non-prejudiced person is distinguished by tolerance of ambiguity.

His (*sic*) speech abounds with qualifying phrases and overintellectualization. He seems repeatedly unable to verbalize a generalization before he is overwhelmed by a rush of qualifications. Further, his thinking is rich in philosophising, psychologizing, and poetic statement (Adorno *et al.*, 1950, p. 463).

In contrast to the bigot, the cognition of the non-prejudiced individual is said to be characterized

by constant particularization.

In contrast, a rhetorical account of cognition suggest that witcraft, being a feature of all argumentation, will also be a feature of the thinking of all individuals. Billig (1985a) has provided a trenchant argument for this conclusion: "If a category is to be applied, it must be particularized or selected from other categories" (p. 93; see also Billig 1987a). Thus, rather than being different properties of mind, categorization and particularization are viewed as complementary rhetorical strategies which provide the basis for all thinking. The thinking of prejudiced and non-prejudiced persons should feature both categorization and particularization, intolerance and tolerance of ambiguity.

Rather than seeking individual differences in intolerance of ambiguity, therefore, the rhetorical account anticipates contextual variability as persons argue about the essences of categories and particulars. According to rhetorical theory, "the meaning of notions depends on the systems in which they are used" (Perelman & Olbrechts-Tyteca, 1969, p. 134). The classic example regarding the contextual nature of the meaning of violence is the way in which the 'violent criminals' of an old regime are released from prison to be the 'heroes' of the next. This implies the necessity of ambiguity tolerance across context, as the particular instances which make up the category 'violent criminals' must be removed and placed in another, namely 'heroes'. This means that values such as peace and violence will be continually being re-defined as their context of application changes.

This is true also of micro-contexts which arise in different parts of a single piece of talk. For, like the openness of history, micro-contexts of dialogical joint action are always uncertain, producing unintended consequences (Shotter, 1993a). This is illustrated in the following extract. In responding to a question regarding the assassination of Chris Hani, Koos Vermeulen attempts to draw categorical distinctions between talking and warring, but is forced into a compromise as the interviewer changes the context of the distinction, from the ANC to Vermeulen himself:<sup>9</sup>

#### Extract 1

093 *Vermeulen*. I'm not for any person to be assassinated. I think with talking (.) we can do  
094 a lot, but then on the other hand we must keep in mind that the ANC want to talk and they  
095 want to er war, and there is no way for both of of it. There's no room for both of it.  
096 *Leslie*. But then the person you're supporting killed, assassinated people, or assassinated  
097 Mr Hani. Um and that that is not talking.

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<sup>9</sup> The transcription notation is based on that described in the Appendix to Potter and Wetherell (1987).

098 *Vermeulen*. Right, the fact is that one should look at a motive, at a background of a  
099 person. The person that killed Mr Hani was someone that fled communist tyranny. He was  
100 a victim for the best part of his life of communist tyranny and its logical that in a time of  
101 despair anyone of those people feel more threatened than any anyone else and he would go  
102 for the chief of the Communist Party.

First, Vermeulen draws categorical distinctions between 'talking' and 'warring' in a manner characteristic of intolerance of ambiguity. He establishes unambiguous boundaries around these respective categories by suggesting that one can either desire to talk or to war, but not both. This is reminiscent of the portrait of the bigot who makes a radical and uncompromising distinction between Blacks and Whites, believing that there are fundamental differences between all instances of both categories. Moreover, as with prejudice, a value gradient is established between the two categories as Vermeulen reiterates his "heartfelt desire for peace" by stating that he would prefer talking to violence. However, since the ANC want war, any violence on the part of WAM may be construed as a legitimate act of self-defence. Later, Vermeulen makes explicit this implicit theme when he suggests that "they [communists] are prepared to invade my country" (line 142).

By drawing an unambiguous distinction between talking and warring, Vermeulen has proposed a simple, general principle which covers a wide range of applicability — any political strategy can be viewed as either an instance of 'talk' or of 'war'. This is the type of universal rule which Perelman & Olbrechts-Tyteca (1969) suggest, outside pure formalism, "remain clear and univocal only in relation to a field of application that is known and determined" (p. 133). Leslie effectively changes the field of application by suggesting that Vermeulen's support for Waluz constitutes a infringement of his value for talk and negotiation. Leslie has uncovered an incompatibility in Vermeulen's argument, for he himself is found to be talking peace while supporting violence.

To display an inconsistency in an argument is to "expose it to condemnation without appeal" for the ridiculous is the "principal weapon of argumentation" (Perelman & Olbrechts-Tyteca, 1969, pp. 195 & 205). Leslie's tone is one of ridicule. Indeed, the second sentence in Leslie's reply adds no new content (knowledge), but is appended for its rhetorical effect in displaying ridicule toward Vermeulen's inconsistency. Not only has Vermeulen broken his own rule of talking and warring, but as Leslie points out, he has also compromised his "heartfelt yearning for peace" by supporting Waluz.

There is no way to resolve this conflict in a Tetlockian sense. It is not possible to now bolster the value of violence and minimize the value of peace, for both peace and violence are valued commonplaces. Whatever psychological congruency functions may be motivating ideological

monism, these are in direct conflict with the rhetorical requisite for flexibility. Bolstering one value in favour of the other will drive Vermeulen into a dogmatic corner and open him up to further attack. However, just like the validity of a general principle, incompatibility exists also only in relation to a specific situation (Perelman & Olbrechts-Tyteca, 1969). Thus, by focusing on the particularities of the situation, it may be possible for Vermeulen to reconstrue the deed, qualify his support for the assassin, and thereby change the whole matter. Vermeulen may "thematize different aspects of the common topic" in an effort to establish new a perspective from which the assassination may be viewed/discussed (Graumann, 1990, p. 121).

At this point Vermeulen engages in the process of particularization, a strategy which is unexpected from traditional psychological theory. Specifically, he psychologizes the assassination by seeking Waluz's underlying motive. The act of violence is thereby rendered "logical" and the aggressor is portrayed as the victim. Under such circumstances, the murder of Chris Hani can no longer be viewed as an unjustified and immoral attack, but the act of a threatened and desperate man. The assassination is effectively extracted from the category 'violence' and particularized in a manner indicative of tolerance of ambiguity. No longer is the political world divided simply into acts of talk and acts of violence, but what may first appear as an act of violence, may be a psychological act of despair or a defence against external threat, exempt from moral censure. Like Adorno *et al*'s low-scorer, Vermeulen's thinking is also rich in philosophising and psychologizing as he engages in criticism and justification.

This instance of rhetorical flexibility in Vermeulen's talk is not an isolated aberration which has been carefully selected to make a counterfactual point. On the contrary, the whole interview is suffused with examples of witcraftful categorization and particularization. One of the more striking instances of variability in Vermeulen's style of thinking is the manner in which he draws rigid distinctions between the categories 'communists' and 'anti-communists', 'christians' and 'atheists', and between the 'ANC' and 'WAM' throughout the interview, yet, when justifying his support for the assassin, claims that WAM and the ANC are similar in the "duty" which they have toward their own people (lines 035-040 and 165-167). Here he draws unambiguous distinctions between two organizations with reference to political and religious criteria, then collapses them under a superordinate, but closely related category, 'organizations with moral duty'. Another noteworthy instance of variability is the adroit manner in which Vermeulen employs the category 'South African'. At the beginning of the interview, when explaining WAM's global connections (lines 024-032), South Africa is portrayed in a liberal fashion as 'just another country'. He admits that he is not sure whether Waluz is a South African or not, and suggests that these boundaries are permeable as they are unimportant and unrelated to his support

for Waluz (lines 044-050). However, South Africanness becomes salient in the context of communists "prepared to invade my country" (line 142). Not only does the category become salient, but rigid and quite creative categorization is involved as the Transkei is particularized as a "traditional land which belongs to the Xhosa people" and extracted from the category 'South Africa'. The result, quite different in style from the fluidity of national boundaries discussed earlier, is that the Transkei is "in South Africa, but not part of South Africa" (lines 143-152).

As these examples illustrate, it would be incorrect to suggest that categorization is necessarily intolerant of ambiguity, while particularization is necessarily tolerant. Rather, Billig (1987a) argues that the two processes are "deeply interrelated". The selection of an appropriate categorization depends upon a prior particularization and vice versa. To categorize the Transkei involves extracting it as a particular from the category 'South Africa'. According to Perelman & Olbrechts-Tyteca (1969), categorization provides a "foothold" for particularization since categorization implies the likening of two particulars. The two processes are always available in rhetoric; and thinking, as one would expect from its development in dialogical contexts of joint action, is never complete, for it is always possible to devise new justifications for categorization or particularization by seeking new essences.

Rhetorical psychology and certain strands of discourse analysis have been criticized for the voluntarism which is implicit in the notion of a potentially endless process of invention or construction (Bowers, 1988; Parker, 1992; Reicher, 1988). By bracketing off 'the real' as the means by which socially shared understandings are constrained and ordered, rhetorical psychology has tended to stress the agentic properties of the subject who can continually reinvent new arguments. Accordingly, rhetorical psychology, like social constructionism, has tended to emphasize 'making' of the 'real' rather than 'finding' constraining and productive structures (Bhaskar, 1993).

However, this emphasis is not endemic to social constructionism, and rhetorical psychology and discourse analysis can accommodate a critical realist philosophy (e.g., Parker, 1992). Some discourse analysts have argued that what renders categories and particulars 'natural' is not their essential attributes, but the historical way in which they are held in place in language/power relations (Bakhtin, 1981, 1986; Foucault, 1972, 1978; Parker, 1992). Since language is ideological, institutional, and thoroughly embedded in power relations, individuals cannot simply categorize and particularize *ad lib*. This is well demonstrated by Vermeulen's attempts to extract the category 'Transkei' from the category 'South Africa', and thus particularize it as distinct (lines 143-152). It is not that Xhosa's are somehow essentially similar to the Basotho (who live

in the independent state of Lesotho), and different from the Cape Malay or Bushmen (who have no "traditional land"). Rather, Vermeulen is here (re)producing ideological categories established by apartheid. He is seeking essences in the discourse of apartheid. However, in a changing South Africa it is with obvious difficulty that Vermeulen draws on the apartheid discourse. He criticizes the Nationalist Party for having "abused the apartheid system" (line 011); and veers away from the racial criteria of partition — to the extent even of opening his organization "for all races" (line 110) — to cultural criteria (i.e., "Xhosa people", "traditional land"). Accordingly, 'apartheid' must be re-defined — by a process of particularization/categorization — "as a system where every group that possesses its own race, culture, historical background, as well as their own historical lands" (line 015-016). If the reality underlying social behaviour is discursive, then it is not static. The meaning of the categories 'peace' and 'violence' are equally historical and ideological (Durrheim, *in press/b*). It is with shifting "regimes of power" that Vermeulen is equipped to employ psychological criteria to argue for the non-culpable nature of an act of violence (cf. Foucault, 1977).

This implies that categorization and particularization require argument, and correspondingly, thinking, in order to overturn established ideological understandings. Perhaps this is why the Right is considered intolerant of ambiguity. Since the Right is defined in terms of its support for traditional values and resistance to change (Eatwell & O'Sullivan, 1989; Wilson, 1973), it may be expected to employ established categories which require less original justification. This resistance to change is, however, not a universal aspect of the Right, and therefore the thinking of the Right may well present flexible attributes, particularly with changing historical and dialogical contexts. Possibly the most radical example of this flexibility is inclusion of Blacks into South African right-wing organizations such as WAM. Such moves require redefining the rigid boundaries which have separated the categories 'Black' and 'White', and recasting particular WAM members who "objected strongly to the inclusion of Blacks" as irrational bigots who "can go and join the AWB" (Vermeulen, cited by the Staff Reporter, *The Argus*, 1993). Overturning convention requires argument and flexible styles of thinking.

Billig (1987a) suggests three ways in which tolerance of ambiguity may be manifest in argument. The first two — arguing about the essence of categories, and arguing about particulars — have already been identified in Vermeulen's thinking. The third is a special instance of the former. The argument itself can become the object of argument (Billig, 1987a, 1989b; see Parker, 1990a for a similar sentiment). Types of argument (e.g., particularization and categorization) are themselves categories, and the appropriate category to apply to a particular argument may become a bone of contention. This abstract level of argument is especially important for an analysis of

political thinking, for it provides a means by which to disqualify arguments and thus remain unchanged in a manner characteristic of dogmatic thought.

### **‘Double talk’: Reflecting on tolerance of ambiguity**

Arguments about arguments concern a different level of reality. Here one is reflecting on talk and language, rather than the world of substance and ideas. Billig (1989b) has analyzed one aspect of this layer of reality most effectively in his paper, *The argumentative nature of holding strong views*. Here he studies the way in which ‘strong views’ become an issue of debate, and are criticized and justified in terms of their being pushy and unreasonable.

Arguments about arguments speak to two different layers of reality simultaneously: at once, they refer to components within an argument, and to accounts of social reality (Billig, 1989b). By criticising an interlocutor for his or her strong views, one is criticising a category of argument, but also criticising the expressed views. Thus, although it is possible for heuristic and analytical purposes to distinguish arguments about arguments from arguments about content, the researcher must remain cognisant of the dual nature of views. Nonetheless, arguments about arguments open up an entirely new domain for rhetorical analysis because we need to study their effects and the manner in which they are deployed. According to Billig (1989b), for example, "it is necessary not to treat the concept of ‘strong views’ as an analytic concept, but to see how, and in what circumstances, people are construed as having strong views" (p. 215).

The focus of the present chapter is on a specific class of arguments about arguments. Because the thesis aims to investigate tolerance/intolerance of ambiguity, an argument will be analyzed in terms of how and in what circumstances people are construed as engaging in ‘double talk’. As has been established, everyone, including neo-fascist ideologues, are tolerant of ambiguity as a necessary feature of their arguing and thinking. However, ambiguity tolerance can be a topic of discussion, not only amongst psychologists interested in political cognition, but for anyone engaged in argumentation. As will be demonstrated, arguments about ‘double talk’ have many commonalities with arguments about tolerance of ambiguity. The Vermeulen text was specifically chosen because, like many on the Right, Vermeulen disregards his own ambiguity tolerance, and construes others as engaging in ‘double talk’:



Extract 2

- 054 *Leslie*. Ok, you said Hani asked for it.  
 055 *Vermeulen*. Right, um Hani is a person that was known for *double talking*. You know that  
 056 if you look at the history of the ANC while Hani was commander of Umkontho we Sizwe,  
 057 there were (.) innocent children and elderly people (.) murdered (.) from the beginning of  
 058 the ANC up to today (.) and in doing *double talking* like er in saying that the, its wrong  
 059 to kill children, he first had to distance himself from other people being killed.  
 060 *Leslie*. Ok, (which is exactly the point) the Hani of the past three or four weeks was the  
 061 one talking peace preaching peace all the time. Did you like what he was saying then?  
 062 *Vermeulen*. I did like but I were cautious because as all trained public relations people in  
 063 the communist field do (.) is they *double talk* them out.

Extract 3

- 080 *Leslie*. Ok, if you were to be seen as supporting Waluz, and that's entirely your right, do  
 081 you think it contributes in any way towards solving the problem of South Africa? Do you  
 082 think it goes anywhere towards creating a peaceful atmosphere between yourselves as South  
 083 African and the other South Africans who might hold a different view?  
 084 *Vermeulen*. Well, Marxism is unacceptable for this part of the country. Marxism failed  
 085 after seventy of experimentation in the USSR and after 70 years it costed hundreds of  
 086 millions of lives plus torture and I cannot, no sane person can permit that to happen here.  
 087 Mr Hani never tried in any way to alter the constitution of the SACP. He never er  
 088 distanced himself from things that Mr Slovo said. He never said he's sorry about all the  
 089 killings in the past. So that what he said in the past 3 weeks might have been innocent, but  
 090 at this stage, and unfortunately he ca won't be there to prove anything in the future, but  
 091 at this stage we looked at it as *double talking*.

Overtly, accusations of double talk fulfil a dual purpose in these extracts. Their immediate function is to comment on the reality of Hani's political activity. Hani is construed as a person engaging in 'double talk'. It is important to bear in mind that this is a construction rather than a reflection of the reality of Chris Hani. Peace and violence are inherently dilemmatic, and everyone, including Vermeulen, must employ flexible rhetorical strategies to condemn and/or justify violence. Everyone is expected to manifest variability in their views as they categorize and particularize instances of violence in different contexts. A second function of 'double talk' is to disqualify Leslie's argument. Since Leslie is 'speaking for' the deceased, by discrediting Hani as a person engaging in 'double talk', Vermeulen is undermining Leslie's attempts to construe Hani as a man "preaching peace all the time". Yet, there is a third audience, and a third persuasive function of accusations of double talk. Vermeulen's attempts to discredit Leslie have little hope of 'moving' him, for Leslie's structural position in the dialogue is that of the adversary. The audience to whom Vermeulen appeals with his accusations of 'double talk' is the watching/listening public.



Arguments about arguments are not mere trifles in comparison with arguments about 'reality'. On the contrary, as Extract 2 shows, accusations of 'double talk' are used by Vermeulen to warrant the assassination. In his first reply, Vermeulen justifies the assassination as a legitimate act of self defence. To rationalize his support for the assassination, he appeals to the "universal audience" with the blameworthy 'fact', that the ANC has murdered innocent children and elderly people (cf. Perelman & Olbrechts-Tyteca, 1969). Immediately, though, the statement loses its factual status as Leslie — while not denying the appeal to the universal audience — suggests that Hani, rather than talking violence, had become a man of peace, thereby disqualifying him from 'legitimate' assassination. Although Vermeulen adds that he had "liked" Hani's peace talk, it is qualified as 'double talk', and Vermeulen need hence not retract his support for the assassination.

'Double talk' is used here to denote something non-genuine and/or irrational in Hani's appeals for peace: on the surface Hani is talking peace, but behind the scenes he is plotting murder. Thus, even though Vermeulen and Hani are in agreement about 'peace' (in the universal sense that it is wrong to kill "innocent children and elderly people"), there is an apparent level of disagreement to their agreement (cf. Billig, 1987a, p. 198). It is here that strong parallels are to be found between 'double talk' and ambiguity tolerance. 'Double talk' is used to denote inconsistent, contradictory, and hence, irrational endorsement of categories. In one instance a person may advocate or practice 'violence', but in another, 'peace'. The conflict may arise either through a disjuncture between talk and action (lines 057-059), or between talk across different situations (lines 087-088). Thus, 'double talk' denotes an unacceptable tolerance of ambiguity in rhetoric, as the particulars which comprise a category at one point are incongruent with those which comprise the category at a second. Hani is construed as a person engaged in 'double talk', since 'peace' is defined in terms of armed resistance on one occasion, and in terms of talking reconciliation on another.

'Double talk' is, however, open to a number of points of ambiguity which permit flexibility in its usage. Firstly, there is no definite time boundary around which two incongruent instances may be brought into conflict as an occasion of 'double talk'. In Hani's case, for example, activities "from the beginning of the ANC up to today" are brought into conflict with "the past three or four weeks". Vermeulen recognises the open nature of dialogue when he argues that, were it not for the "unfortunate" death of Hani, he may have been able to "prove", in the future, his non double talking stance toward peace. In addition, the potential for ambiguity in the construal of an instance of 'double talk' is expanded by drawing incongruity between the talk and/or action of a single individual, or between two different individuals of a single organization, as between Mr. Slovo and Hani in Extract 3.

Unlike Adorno *et al.*'s high-scoring bigot, the double talker does not manifest a belief that fundamental differences exist between all instances of two different categories. On the contrary, 'double talk' is characterized by a highly flexible and ambivalent form of rhetoric where one category may contain elements (i.e., beliefs, values, practices, emotions, etc.) which are *argued* to be diametrically opposed to each other. While the ANC, for example, may see no conflict between *struggling* for peace and *talking* peace, Vermeulen construes the ANC's conception of 'peace' as one containing elements of 'peace' and elements of 'violence'.

In addition to the rhetorical aspects of 'double talk', there is a significant psychological component which is evident in Extracts 2 and 3. Over and above signifying irrational category usage, 'double talk' is used to denote a level of non-genuineness or insincerity in reasoning. Accordingly, Hani must not only adopt an unambiguous position on 'peace', but he must "distance himself" from acts of violence altogether. In Extract 2, Leslie argues that Hani's "talking peace" was precisely an instance of the required distancing. However, by drawing on the ambiguity of 'double talk', Vermeulen is able to counter by suggesting that this peace talk was merely another occasion of 'double talk'.

What then constitutes the antithesis of 'double talk'? What does it mean to be a non double talker? In Extract 3 Vermeulen is explicit — to be extracted from the category 'double talker', Hani must not only distance himself from acts of violence, but also from the talk of others within the SACP, alter the constitution of the SACP, and apologise for past deeds. In sum, Hani must reject all ambiguity in favour of Vermeulen's ideological position, but must also demonstrate sincerity in this change. In other words, the antithesis of 'double talk', as used by Vermeulen, is nothing short of conversion. Appeals to conversion are implicit in criticisms of 'double talk', and may also be central to the usage of tolerance/intolerance of ambiguity.

This is an aspect of ambiguity tolerance which is also present in conceptualizations of authoritarian cognition offered by psychologists, but which has scarcely been recognised. Closely related to the conceptualization of intolerance of ambiguity, is the construct of rigidity, the "inability to change one's [cognitive] set" (Rokeach, 1948, p. 260; also Adorno *et al.*, 1950; Christie, 1993). The concept of change, however, is always equivocal since it entails not only the notion of movement, but also direction. Despite the large body of research into cognitive rigidity, the directional aspects of change have not been questioned since rigidity has been deemed a personality variable rather than a functional speech act. Rokeach (1948), for example, employed the Einstellung water-jar test to operationalize rigidity and flexibility in terms of increased "efficiency and economy". While others debated whether change to the short solution

of the test was indeed "efficient and economic", in comparison employing the single, "most systematic" solution (Goodstein, 1953), no one has questioned the status of these 'visions of the good' in terms of their roots in a modern, capitalist, and bureaucratic social order. So, if the authoritarian was resistant to change, in which direction should this change be executed? Or, if an individual must change from an ambiguous, double talking style, which side of the contradictory positions should be adopted?

It is quite clear that for Adorno *et al.* (1950), on a social level, change was to be effected toward a non-prejudiced, rational order. It would be incorrect to suggest that Adorno *et al.* (1950) valorized the notion of change as an insidious attempt to inculcate an ideological content (i.e., to talk of intentions and adopt a conspiratorial explanation). However, with no transcendental "correct" position to change to, rigidity-flexibility becomes associated with change to the position of the interlocutor. For Vermeulen, the nature and direction of the final change from 'double talk' to a position of rigidity, results in conversion. In effect, Hani must adopt Vermeulen's ideological position in a sincere manner in order to be relieved of his status as a 'double talker'. Only then will he no longer warrant assassination.

A rhetorical approach to ambiguity tolerance differs substantially from traditional psychological accounts which, by appealing to personality theory, have tended to use 'intolerance of ambiguity' in a purely descriptive sense, delineating types of individuals. The rhetorical perspective, in contrast, assists in highlighting the active, dialogical, and productive manner in which 'tolerance/intolerance of ambiguity' is used in emerging contexts of joint action. Rather than seeking a functional explanation of intolerance of ambiguity within psychological make-up (e.g., to ward off psychodynamic threat), the rhetorical account suggests that ambiguity tolerance is a structural aspect of rhetoric, which itself enters the rhetorical world, and as such, is used to criticize and justify ideological contents. Accusations of 'double talk' are performative and functional — they question the legitimacy of contrary positions by framing them as irrational and contradictory, and by suggesting that conversion be the only path to rhetorical virtue.

If one accepts Billig's (1987a, 1991; Billig *et al.*, 1988) contention that ideologies are structured in terms of dilemmas, then not only the extreme Right, but people of all ideological persuasions may use/make accusations of 'double talk' to disqualify an interlocutor's argument since everyone is expected to manifest variability in talk. During the period of transition in South Africa, for example, conservatives, moderates, and leftists accused the PAC (far Left party) of 'double talk' in trying "to justify an untenable policy" of "simultaneously negotiating and fighting the 'armed struggle'...[when] the broad mass of people want peace, reconciliation and reconstruction" (SAP

captain Craig Kotze, cited by the Staff Reporter, *Financial Mail*, 1993, p. 45; see also Stober, 1993).<sup>10</sup> 'Double talk' and ambiguity tolerance, therefore, appear to be not a property of any particular type of individual or ideological position, but a rhetorical strategy which may enter an argumentative exchange and be employed functionally by ideologues and mass publics of all ideological persuasions.

## **Reflections on right-wing reflections**

There are remarkable similarities between the manner in which Vermeulen accuses Hani of double talk and the manner in which Jaensch (1938) denounced S-type liberals of the late 1930's for having "no firm tie to reality" (p. 37). In essence, the cognitive and perceptual attributes of their ideological opponents are portrayed as ambiguous and prone to variability, inconsistency, and change.<sup>11</sup> It appears as though the use of 'double talk' as a means of criticism is a particularly prominent feature of right-wing thinking. We are thus left with an unresolved difficulty. If tolerance of ambiguity characterizes everyone's thinking, why have ideologues on the Right so often been portrayed as intolerant of ambiguity? If anyone may reflect on, and criticize an interlocutor for 'double talking', why and how is it so characteristic of right-wing ideologues?

There are a number of possible approaches to these questions. The common response by social psychologists has been to argue that there are real differences in the psychological make-up of the Left and Right. Since right-wingers are psychologically predisposed to rigid perceptual and cognitive styles, they reject the threatening ambivalence of the Left (which is also psychologically predisposed). However, as the present work has argued, there are a number of empirical and theoretical difficulties with this account, most important of which are the manifest intraindividual variability in cognitive style and the rhetorical demand for both flexible and rigid patterns of thought. Given this variability, and the emergent nature of cognitive style, there can be no decisive (empiricist) test situation by which to establish that the Left is more tolerant of ambiguity than the Right — i.e., there is no definitive "constant conjunction of events" linking intolerance of ambiguity with the Right.

A second, more radical, resolution of this dilemma is to take a strong constructionist position and

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<sup>10</sup> Similar 'descriptions' are made about the IRA who are double talking in remaining armed while wanting to negotiate. Once again, conversion is the persuasive effect.

<sup>11</sup> See pp. 1-3 of this thesis for some discussion of Jaensch's work.

bracket off all questions of an unknowable reality, including a psychological one. The constructionist would argue that ambiguity tolerance and 'double talk' are merely constructions which are used performatively in talk to achieve certain objectives. This approach, however, tends to ignore the important observation that variability is not endless, but tends to be organized historically around and within institutions, power relations and ideologies (cf. Parker, 1989b, 1992). While everyone's thinking is characterized by the use of, and reflection on, both tolerance and intolerance of ambiguity, certain reflections (e.g., 'double talk') may be more characteristic of some ideological positions than others. The task of analysis is to demonstrate how certain cognitive contents and styles are organized into broader ideological patterns.

The approach adopted in the present work is drawn from a critical realist position (Bhaskar, 1986, 1989a, 1989b). Although critical realists reject an individualistic empiricist ontology (Manicas & Secord, 1983; Porpora, 1989), they resist the Nietzschean undercurrents of post-Marxist thought which infiltrates the strong constructionist (or postmodernist) position — suggesting that there is "no given order *in* reality at all" (Eagleton, 1991, p. 203, emphasis in original). This strong constructionist assertion, they argue, leads to blooming, buzzing picture of reality which relinquishes the possibility of political action (cf. Burman, 1990; Dews, 1987; Eagleton, 1991; Parker, 1992; Simons & Billig, 1994). Instead, critical realists have conceptualized reality as structured, and have understood social structure in Marxian terms, as "the sum of relations within which individuals [and groups] stand" (Bhaskar, 1989a, p. 26). This relational model allows Bhaskar to propose an ontology which is not fixed, but social-relation-dependent, praxis- and concept-dependent, and manifests a material-space-time specificity and substantial geo-historicity. Such an ontology allows for human variability, agency, and the social and historical fluidity of human nature, but does not deny an underlying organization to human phenomena. Specifically, critical realists argue that the oppressive, exploitative, and productive effects of institutional discourses, and ideological and power relations, provide evidence of underlying causal (relational) structures (Parker, 1992).

As noted in the introduction to this chapter, a distinction between different approaches to social constructionism, discourse analysis, rhetoric, and critical realism within social psychology rests on the differential emphasis that some authors lend to the variable, constructive, "making" aspects of human reality, and the emphasis that others give to the organized, determined, and "finding" aspects of reality. For example, where Shotter emphasizes the creative activity of individuals in contexts of joint action, Parker stresses the manner in which our creative abilities and subject positions are constrained and produced by an extra-individual reality. My argument here is that these two emphases are indivisible.

Bakhtin's distinction between utterances and speech genres is useful to illustrate this point. Bakhtin has recently become influential for he, like the post-structuralists, explicitly rejects the kinds of essentialism which have characterised modernity. Specifically, he rejects the distinction made by Saussure between *parole*, as a purely individual act, and *langue* as a formal (grammatical) system of language (Bakhtin, 1981, 1986; Volosinov, 1973). Instead, he collapses the dualism between agency and structure or individual and social by personalizing *langue* and by socializing *parole*.

By definition, utterances are real social events which are set in dialogical context. Unlike *parole*, which includes purely individual (random) speech acts, utterances, the units of speech, are determined by a "change in speaking subjects" (Bakhtin, 1986, p. 71). For example, the debate between Vermeulen and Leslie may be seen as a sequence of utterances, unfolding as the interlocutors respond to each other. The dialogical nature of utterances sets them apart from *parole*, for, as *responses* which occupy a definite position in a given sphere of communication, they are thoroughly social and relational. "Each utterance refutes, affirms, supplements, and relies on the others, presupposes them to be known, and somehow takes them into account" (p. 91). Utterances, therefore, are not individual acts of will and intelligence, and they can "in no way be regarded as a completely free combination of forms of language, as is supposed, for example by Saussure" (p. 81; see also Foucault's (1984) critique of structuralist conceptions of 'event'). Nonetheless, each utterance is unique and unrepeatable for utterances are produced within the developing contexts of joint action, and their meaning is determined by the shifting relations between speaker, audience, and topic.

Speech genres, in contrast, are "relatively stable and normative forms of utterance" (Bakhtin, 1986, p. 81). They provide the background "perspective fixation" from within which utterances may be produced within contexts of joint action (Rommetveit, 1990). However, although speech genres organize our speech much like Saussurian *langue*, genres are more "flexible, plastic and free" than the formal grammatical *langue* (Bakhtin, 1981, 1986). Their plasticity derives from the fact that they are distinctly socio-historically human, being a sedimentation of the utterances of others — "genres throughout the centuries of their life accumulate forms of seeing and interpreting particular aspects of the world", and are (re)produced on specific occasions of dialogue (Bakhtin, 1986, p. 5; 1981, chap. 4). Unlike *langue*, which provides an abstract grammatical system by means of which individuals may produce diverse speech acts, speech genres provide an "horizon of expectation" which is brought to bear on dialogical relations. For, genres are primarily intentional, providing "specific points of view on the world, forms for conceptualizing the world in words, specific world views, each characterized by its own objects,

meanings and values" (Bakhtin, 1981, p. 291).

The features which distinguish Bakhtinian utterance and speech genre from Saussurian *parole* and *langue* are three (see Bakhtin, 1981, 1986; Shotter, 1993a; Volosinov, 1973, 1987a). First, utterances and genres are dialogical, always defined in relation (as responses) to other utterances and genres. Second, as a consequence of their historical, relational and dialogical nature, they are always expressive and intentional. Finally, both utterances and genres have a living quality to them and cannot therefore be objectified (e.g., as a system of grammar). It is this living quality which makes utterances and genres indivisible, because although genres are "sclerotic deposits", they are given life through utterances — "each word tastes of the context and contexts in which it has lived its socially charged life; all words are populated by intensions" (Bakhtin, 1981, p. 293).

In contrast to the tendency for psychologists to pit agency against structure — making against finding — or vice versa, in developing their own positions, Bakhtin suggests that utterances and speech genres are indivisible because:

If speech genres did not exist and we had not mastered them, if we had to originate them during the speech process and construct each utterance at will for the first time, speech communication would be impossible (Bakhtin, 1986, p. 79).

This is the case since genres provide the authorial intent/feelings and speech plan — both of which cannot be reduced to psychology (see Shotter, 1993a, 1993b) — which are necessary for the production of utterances. In the place of modernist dualisms, Bakhtin offers a holistic picture of communicative interaction, where genres are always already present in the creative contexts of joint action. Ironically, then, "when we construct our speech, we are always aware of the whole of our utterance...we do not string words together smoothly and we do not proceed from word to word; rather it is as though we fill in the whole with the necessary words" (Bakhtin, 1986, p. 86). The thoughts we think must have already been thought.

If 'speaking subjects' are accepted as the ontology of the second cognitive revolution, then this ontology involves more than the immediate events of 'persons in conversation', for utterances and genres are two sides of the same coin, and where one is the other must be also.

As a living, socio-ideological concrete thing, as heteroglot opinion, language, for the individual consciousness, lies on the border between oneself and the other (Bakhtin, 1981, p. 293).<sup>12</sup>

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<sup>12</sup> Heteroglossia is a Bakhtinian neologism depicting the "base condition governing the operation of meaning in any utterance" (Bakhtin, 1981, p. 428). It is the locus where the centralizing and decentralizing forces in language (i.e., "centripetal" and "centrifugal" forces) collide, and is the condition which ensures that the meaning of an utterance is not given by the words employed or their reference, but is context-bound and localized.



According to this relational conception of language, it is possible for critical realism to accommodate speaking subjects as its social-relation-dependent, praxis- and concept-dependent ontology. Speaking subjects are 'things' in the sense that they are "structured and differentiated ensembles of tendencies, liabilities and powers (Bhaskar, 1989a, p. 19). According to the view advanced here, these tendencies, liabilities and powers are dialogical, emerging as generic utterances, originating on the borders between ourselves and others: in the immediate context of the utterance, and between ourselves within contexts of joint action and others within similar contexts past, present, and future. This denies neither the Shotterian emphasis of the creative aspects of joint action, nor the Bhaskaresque/Parkerian emphasis on socio-economic-political structures, for in the heteroglotic world of Bakhtin, dialogic utterances achieve/reproduce social stratification as Bakhtin's carnivalistic world merges with Volosinov's Marxist one (Bakhtin, 1981; see also Holquist, 1986). If, as Quintillion (1920) says, "language is currency minted with the public stamp" (p. 113), then its usage toward certain ends in particular contexts and its broad currency-like intentional nature are indivisible, for without the one the other could not possibly exist.

The analysis in the chapter thus far has focused on utterances. This has been useful for, by situating thinking within a dialogical context, it has been possible to highlight the major problems with the dominant conceptions of cognitive style offered by social psychologists. Specifically, cognitive style cannot be seen as a formal property of mind which operates universally like some unspoken rule "behind" what people say and do. The observed variability in style over subtle shifts in context suggests that an adequate account of cognitive style must shift from an ontology of "essence-as-substance" (Séve, 1975) to a relational ontology where properties are not possessed (by individuals, personalities, minds, or ideological groups) but are emergent features of dialogical interaction.

Instead of abstract and universal rules of cognition, we may follow Moscovici (1984) in suggesting that the rules of cognitive style have a spoken nature. Intolerance of ambiguity, rather than a property of mind, takes the form of a decree, specified in terms of content — "contradictions are prohibited!" However, these decrees are more like rules-of-thumb than rules since they are applied in a variable manner in developing contexts of joint action. This observation reiterates Billig's (1987a, 1991; Billig *et al.*, 1988; Prelli, 1989; Söder, 1990) point that commonsense is dilemmatic. Opposing the rule 'contradictions are prohibited' is another, 'rigidity is prohibited'. From a rhetorical perspective, therefore, tolerance versus intolerance of ambiguity can be seen as two contrary themes which underlie the dilemmatic nature of arguing about the rules of argument, and which are used in a functional manner in developing contexts



of criticism and justification.

Cognitive style is thus dilemmatic and, as such, the conflict between opposing contrary themes must be diffused and negotiated. Strategies of conflict resolution are, however, not invented by individuals, but are generic. Shore's (1990) dialogical anthropology suggests that conflict resolution is achieved socially:

...through elaborate cultural discourses that render one pole of the contradiction relatively articulable and thus legitimate, and the other pole relatively inarticulate and illegitimate... [Accordingly], cultural systems do not invent values [or rules] so much as they orchestrate rhetorical strategies, organizing the perception of value-laden situations with standardized and culturally acceptable formulations (p. 174-175).

Shore is not here advocating a theory of norms raised to a second power of abstraction. Rather, rules, like values, are *organized* into cultural systems through "elaborate cultural discourses" which favour one pole of a contradiction, allowing it to *appear* normative within a particular cultural system. At his most Bakhtinian, Shotter (1993a) makes a similar point when he argues that we do not share with members of our social group a set of beliefs or values, "but a set of shared semiotic procedures or ethnomethods (Garfinkel), ways of making sense — and a certain set of *ordered* forms of communication, or speech genres" (p. 46). In contrast to norms, speech genres are relational, and, while they may "partially diffuse" conflict, they are always under heteroglotic tension and must be applied thoughtfully when exercised as utterances.

I want to argue that the "elaborate cultural discourse" or speech genre which is associated with accusations of 'double talk' among the far Right is the conspiracy ideology. The methodological orientation which I take is explanatory rather than predictive. I do not make the claim that the right-wingers use accusations of 'double talk' more frequently than liberals and radicals because there is no decisive test situation whereby such a claim could be established. Instead, as Bhaskar (1989a) recommends, the social sciences must be "exclusively explanatory" (p. 21). What I hope to do in the discussion that follows, is to show how accusations of 'double talk' are part of the "rationality" of the life world of a right-wing ideological position — an ideological position which has relied on conspiratorial explanations to resist the pressures of a changing world. Although the approach is explanatory, it is causal in the sense that being immersed in the intentionality of a particular speech genre prompts one to see the world and act in certain ways.

Conspiracy theory is integral to the thinking of the far Right and, indeed, has been viewed as a defining feature of fascist writings (Billig, 1989a). According to the view advanced here, however, it would be incorrect to see conspiratorial themes as norms or beliefs possessed by fascist groups. Rather, 'conspiracy ideology' is a speech genre which has become associated with

fascist rhetoric for historical reasons, and which is reproduced, refined, developed, and sustained in fascist utterances (written and oral) (cf. Billig, 1978). Conspiratorial themes are a relational feature of fascist rhetoric. Nor would it be correct to suggest that conspiratorial themes are employed only by the far Right (cf. Billig, 1987b). However, due to the historical position of the far Right as the guardians of tradition against a changing and liberalizing world, the Right has adopted conspiratorial themes in argumentative contexts, and today conspiratorial language is permeated with nuances and accents of the Right.

In terms of the relational position of the far Right with regard to other social groups and ideologies, conspiracy theory is ideally suited to its rhetorical purposes. By definition, the conspirators are powerful groups who master the course of history. Hence, to expose the conspiracy is to argue against the present course of history. As the guardians of tradition and the ideological opponent of the Left, the far Right may employ conspiratorial themes to great rhetorical effect. Indeed, from its earliest modern incarnations, conspiracy theory has had its roots in counter-enlightenment ideas which saw powerful groups as "conspiring to destroy church and state" (Groh, 1987a, p. 23). This theme today finds a home in the right-wing portrayal of the world as a struggle between an ingroup, serving the will of Divine providence, and an outgroup, under Satanic influence, who are set on destroying traditional values — the church and/or nation (Eatwell, 1989b).

Conspiratorial themes of a communist take-over are ubiquitous in the rhetoric of the South African Right (Foster, 1991), and they permeate Vermeulen's dialogue. The extremist version of this theory has historical antecedents in *Voortrekker* mythology, and takes the form of the 'Israelite myth', where the Afrikaner *volk* are seen as a "chosen people", with South Africa their "promised land" (Moodie, 1975; Ridge, 1987; van Rooyen, 1994). A worldwide communist conspiracy is said to have its eyes set on the occupation of South Africa and the destruction of the Afrikaner nation. By so doing, communism betrays itself as the anti-christ, acting against the will of God. These conspiratorial themes structure Vermeulen's thinking even in the brief public interview under analysis here. He is an avowed anti-communist (line 129) who has "discovered" that the country's problems with a communist invasion (lines 006-007, 131-132, 142) are "global" (lines 006-007, 024-026), and that they represent the machinations of the "anti-christ" (lines 134-137). Conspiracy theory is familiar to many Afrikaners and its themes may be persuasive in justifying violence as a legitimate means of defence.

It is against this background that Vermeulen's use of 'double talk' acquires rhetorical force, for it is a "logical" component of a generic whole. If there is a conspiracy afoot and Hani, the anti-

christ incarnate, is talking peace, then this must be an instance of 'double talk'. Moreover, evidence can be found to support the conspiracy because Hani can be shown to be inconsistent and not genuinely committed in his calls for peace. If conspiracy theory is characterized by delusional themes which maintain that something is going on behind reality, and that commonly accepted accounts of reality are merely facades hiding the conspiracy (Groh, 1987b; Wulff, 1987), then identifying 'double talk' in the dialogue of ideological opponents is a powerful and dual means of persuasion. It not only suggests inconsistency, insincerity, and irrationality, but also provides 'proof' of the conspiracy. Accordingly, to appeal to his audience, Vermeulen construes Hani's "preaching peace all the time" as a surface reality which merely obfuscates the true intentions of the conspirators. Any explicit calls for peace on the part of Hani are thus rendered a veneer which communists have been trained to use to "double talk them out" (Extract 2, lines 062-063).

It is by *relying* on conspiratorial explanations that "the intellectual traditions of fascism are impoverished when put alongside Marxism and liberalism" (Billig, 1989a, p. 148). The result of this impoverishment in content is a cognitive style which tends to portray itself as intolerant of ambiguity. Its explanations of change focus on simplistic accounts of 'behind the scenes' conspiracies which it can demonstrate by offering 'in front of the scenes' 'double talk' as evidence. However, since utterances which accuse an adversary of double talk are dialogic, they are not expected to be a consistent feature of far Right rhetoric. Nor is the far Right always resistant to change or intolerant of ambiguity. Vermeulen's attempts to "open up" WAM to members of all races is an example of the impact that recent change in the country has had on the far Right. His actions, however, expose him to potential criticism as other right-wing organizations might construe this change as bowing to the will of the conspirators. In such instances, Vermeulen would need to employ flexible rhetoric to argue that this change in policy does not represent a fundamental change away from the basic principle of apartheid. Depending on the context, this could always be labelled 'double talk'.

Instances of ideologues on the far Right being accused of double talk are, however, exceptional because, on a generic level, the conspiratorial themes of fascism are in dialogical relations with the thematic content of Marxism and liberalism. The generic utterances of the Right are deposits which have sedimented through an age of arguments against change, which have been directed against change toward Marxist and liberal positions. Speech genres are different to grammars and norms because their "sedimentation" is historical and dialogical. Consequently, they reproduce "social stratification...between the forms used to convey meaning and between the expressive plains of various belief systems" (Bakhtin, 1981, p. 290). Speech genres provide intentions for

action and ways of seeing and talking about the world which stratify the social world and provide generic subject positions (e.g., as fascists, Marxists, psychologists, doctors, etc.). Thus,

Every socially significant verbal performance has the ability — sometimes for a long period of time, and for a wide circle of persons — to infect with its own intention certain aspects of language that had been infected by its semantic and expressive impulse, imposing on them specific semantic nuances and specific axiological overtones; thus, it can create slogan-words, curse-words, praise-words and so forth (Bakhtin, 1981, p. 290).

Material positions and intentional practice (e.g., to be for or opposed to change) are thus thoroughly infected by speech genres which have developed out of a history of specific arguments between opposing groups. Through its living history, the far Right has developed curse words like 'double talk', with generic axiological overtones.

The dialogical nature of speech genres has important consequences for the persuasive nature of generic talk. For, just as each utterance has an addressee, "Each speech genre in each area of speech communication has its own typical conception of the addressee, and this defines it as a genre" (Bakhtin, 1986, p. 95). It is by means of the relationship between genre and addressee that an utterance attains its status as a speech act because it is the genre rather than subjective individual processes which renders the utterance intentional. When Vermeulen uses 'double talk' to argue for Hani's conversion, for example, the functional nature of the utterance is not of Vermeulen's making, but stems from the intentional nature of the genre (which has a typical conception of the addressee). The addressee of conspiracy theory is the duped masses who have been misled by the conspiracy. The potential to use 'double talk' to argue for the conversion of an addressee, therefore, is specified by the genre which establishes intentional relations between the speaker, as one who has seen through the conspiracy, and the addressee who has been misled. From this perspective it is clear that Hani is not the addressee because he is a deceased, double talking conspirator, beyond conversion. The addressee is the watching/listening public who have been misled by the conspiracy. Vermeulen is arguing for their conversion, which he suggests is not merely a matter of making occasional acceptable utterances, but results from adopting the conspiratorial genre, accepting a right-wing world view, and being qualified to diagnose 'double talk'. Generic talk (re)produces social stratification.

In sum, the rhetorical perspective does not view intolerance of ambiguity as a property of right-wing psychology. Instead, tolerance and intolerance of ambiguity are argued to be characteristic of the thinking of all people, who must demonstrate contextual variability in cognitive style. However, as an aspect of (rhetorical) reality, tolerance versus intolerance of ambiguity may become a topic of argument, and may be used for criticising and justifying views. As such, intolerance of ambiguity is seen as one pole of a dilemmatic theme of commonsense which

pertains to legitimate argumentation. In addition to theorizing variability in cognitive style, the rhetorical perspective can also account for the organization of certain styles into certain ideological positions. I have argued that themes of intolerance of ambiguity are characteristic of the South African far Right because they rely on conspiratorial explanations of political events. 'Double talk' is an integral part of the conspiratorial speech genre because it acts both as a means of persuasion and as a means of exposing the conspiracy. Finally, it may be added, that by ignoring the dialogical and rhetorical aspects of cognitive style, and painting a picture of unthinking rigidity among right-wing ideologues, social psychologists disregard the persuasive nature of fascist rhetoric. This has been both empirically unfounded and politically naive.

## Conclusion

The main feature of social psychological accounts of cognitive style is their thoroughgoing assumption of monologism. Theorists and researchers have assumed that cognitive style is a property of individual psychology which impacts on mental processing happening behind reality. Accordingly, the vast majority of research has adopted asocial and non-evaluative measures of cognitive style which assign each subject a single score to represent their cognitive style. Even in those few instances where researchers have adopted talk as their object of analysis, they have consistently disregarded its dialogical nature and focused purely on the words of single individuals. This focus is doubly ironic. Firstly, although social psychology has ignored the functional nature of accusations of tolerance or intolerance of ambiguity in rhetorical contexts, it was in precisely within such a context that the literature was conceived. The interchange between Jaensch and Frenkel-Brunswik was initiated within a dialogical context in which accusations of intolerance of ambiguity were used as a means of ideology critique. Cognitive style had to be theorized as a stable and general property of individual psychology for these critical functions to be sustained (see pp. 23-24; Durrheim, *in press/a*). Secondly, by disregarding the social and dialogical nature of the "traits" of cognitive style social psychology has, paradoxically, limited its critical potential. It has failed to quell the resurgence of fascism, for it has portrayed fascist thinking as irrational, has ignored the persuasiveness of fascist rhetoric, and has not engaged fascist argument either at the level of content or style.

This chapter has gone further than merely acknowledging the dialogical nature of thinking. By drawing on insights from the social constructionist literature, it has argued that thinking is nothing more than the use of language in contexts of joint action — arguing is thinking. This has pointed to a methodology which focuses the analysis of language (usage) rather than individual cognitive processing as a means to studying the operation of cognitive style. This involves more

than recording "constant conjunctions" or the differential incidence of cognitive "traits" among different ideological groups. Instead, it encourages a focus on the dynamics underlying the variability of cognitive style, and its organization within ideological traditions. The analysis presented here, for example, has highlighted the rhetorical dynamics underlying the variability and use of cognitive "traits" in dialogical interaction. Also, it has shown how particular stylistic repertoires become associated with ideological traditions, and gain their persuasive character by being part of broader generic ways of speaking. A caveat, however, must be made: the present chapter makes no claim to being a comprehensive study of the different uses of 'double talk' in rhetoric. Indeed, such an aim would be impossible for within the changing seascapes of joint action, its possible uses are potentially infinite.

Is the intolerance of ambiguity (and 'double talk') which has been the focus of this chapter the same phenomenon which social psychologists have investigated? Clearly not. Although there are descriptive similarities between the two conceptions of intolerance of ambiguity — i.e., they both refer to a style of thinking that relies on broad and firmly bounded evaluative category usage — they have radically different ontologies. This shift in ontology is necessary to allow an account of cognitive style to accommodate the manifest variability and functionality of its operation in dialogical contexts of joint action.

## Chapter 7

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# Critical realist conclusions

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*"Facts?" he repeated. Take a drop more grog, Mr Franklin, and you'll get over the weakness of believing in facts! Foul play, Sir.*

(W. Collins, quoted in Bhaskar, 1986, p. 224)

## Critical realism

The main difficulty with empiricism is that it begins epistemologically, from a position of Cartesian doubt, and will admit as knowledge only that which passes the most stringent criteria. Science must aim to delineate the universal laws of nature by recording constant conjunctions of events along Humean lines. In so doing, empiricism renders itself anti-realist because such regularities are not to be found in the world outside the closed contexts of controlled experimentation. This is the crux of Bhaskar's (1975, 1986, 1989a, 1989b) argument for a critical realist philosophy of science. Bhaskar aims to transcend the empiricist ontology implicit in the Humean epistemology by invoking generative structures which function as causal mechanisms behind the flux of events.

Bhaskar thus draws an ontological distinction between underlying generative structures and 'sequences of events'. The latter are created by the experimenter in research practice, while the former are independent of human activity, and may have existed and operated even before there was a science for them to be intelligible to. Chalmers (1988), however, argues that this distinction is fallacious because the experimenter can only be said to cause the sequence of events:

...in the sense that she assembles the appropriate experimental arrangement. But what happens when she has done so is dependent on the way the world is (p. 19).

Chalmers concludes that "the generative mechanisms at work cause the sequence of events, not the experimenter" (*ibid*). In comparison with Chalmers, therefore, Bhaskar is somewhat a constructionist. Although Chalmers may be correct to suggest that the sequence of events which occurs in scientific investigations is produced by underlying generative structures, these patterns of events are certainly not consistently or wholly produced by the generative mechanisms.

On the contrary, this thesis has argued that the "appropriate" investigative arrangements that preceded the sequence of events which lead psychologists to conclude that cognitive style is a personality trait (that predisposes individuals to a particular ideological persuasion) were productive of the sequence of events. Consider a simplified but paradigmatic study in the field. A measure of intolerance of ambiguity, comprised entirely of attitudinal statements (e.g., the Budner scale), is correlated across a sample with a measure of ideological conservatism. The results show a moderate to weak positive correlation. Forget for the moment all the theoretical paraphernalia (e.g., personality, traits, etc.) which accompanies the interpretation of the results. Were these findings caused by "the way the world is" or by the researcher? Only in the minimal sense that individuals tend to endorse ("reliable") attitudinal scales in a consistently radical or conservative manner, can it be said the results were caused by the way the world is. In the main, as Chapter 3 has argued, any possibility of the world acting as it is in such contexts of psychological investigation are screened out by assumptions which have been built into the "appropriate" investigative arrangements. The findings were largely produced by the investigator.

Chapter 3 argued that, in contrast with its original description, the construct of intolerance of ambiguity has gradually come to be seen as an asocial and non-evaluative property of individual psychology which is generalized over context and content domain. Moreover, the reasons for this conceptualization had less to do with attempts to derive adequate accounts of the way the world is, than it had to do with fitting these accounts into an empiricist model of science, and sustaining political critique. In addition, measurement scales have typically incorporated the assumption that intolerance of ambiguity is closely related to certain ideological contents. According to Budner (1962) for instance, "Being intolerant of ambiguity does not lead an individual to favour such things as censorship; rather favouring censorship (in most situations) is part of being intolerant of ambiguity" (p. 49). Not only has intolerance of ambiguity been assumed to be a generalized trait, but it was assumed that it would correlate with ideological conservatism.

In combination, this orientation has resulted in measurement tools which (a) screen out the



possibility for individual variability by assigning each individual in a sample a single score to represent their position on the tolerance-intolerance of ambiguity continuum, and (b) assess cognitive style by gauging the extent to which subjects endorse conservative attitudinal contents. In Danziger's (1985) words, such practice establishes a "methodological circle" between ontology and methodology, thereby closing all possibilities for "the way the world is" to intercede in research findings. The consistent positive linear relationships between conservatism and intolerance of ambiguity on the Budner scale or Dogmatism scale have been created by psychologists by being built into their "appropriate" investigative arrangements.

Chapters 4 and 5 continued by demonstrating that the regular conjunctions of events which have been used to support personality theory are neither so regular nor so confirming of a generalized trait model of cognitive style. Once the assumption that cognitive style is a consistent asocial and non-evaluative individual trait was purged from measurement instruments, "the way the world is" was substantially different. The AAT scale operationalized ambiguity tolerance — as an evaluative attitudinal variable — in a manner consistent with Frenkel-Brunswik's (1949) original description of the construct. Additionally, the AAT scale allowed individuals to express variability in the ambivalence with which they evaluated different authorities. The results contradicted the predictions of all personality-based accounts of ambiguity tolerance. They indicated substantial variability in ambiguity tolerance across content domain, and in the nature of the relationship between ambiguity tolerance and ideological conservatism.

Here I do agree with Chalmers (and so would Bhaskar): when not constrained by a methodological imperative, the sequence of events which are produced in a context of investigation are *partially* attributable to the underlying generative mechanisms at work. The AAT scale allows one to *test* whether ambiguity tolerance is a stable generalized trait. It thus facilitates choosing between two alternative models of psychological ontology: one stable, atomistic, and substance-like, where psychological phenomena are seen as properties of individual functioning; and the other, consisting of underlying generative structures which are manifest as "tendencies and powers". A critical realist standard for investigative adequacy may be derived from this observation: to the extent to which research practice constrains what can be produced in contexts of investigation, it is considered less adequate for a particular investigative enterprise. Of course, this does not mean that the AAT scale does not incorporate assumptions which constrain the 'sequence of events' which can be produced. It does, and is not useful for a number of different investigative enterprises (see pp. 114 & 185). However, the multiple patterns of individual, cross-cultural, and cross-content variability in manifest ambiguity tolerance suggests that the empiricist "thing-like" ontology must be replaced with an ontology which explains cognitive style with

reference to the tendencies produced by underlying generative structures.

The results of Studies 1 to 3 do not suggest that the world is all a flux and that expressions of ambiguity tolerance are thoroughly permeated with variability. On the contrary, while variability was evident in expressions of ambiguity tolerance, widespread regularities — which were not organized or determined by the investigative apparatus — were also evident in the conjunctions of produced events. Firstly, the factor analysis of responses to the AAT scale distinguished very clearly between different domains of authority (i.e., political, religious, and familial domains), indicating that subjects evaluated different authorities within a single domain distinctively. Secondly, ambiguity tolerance toward a particular domain of authority correlated with only those dimensions of ideological conservatism which were relevant to that domain (e.g., AAT-Pol and Subtle Racism for the White sample). This suggests that ambiguity tolerance was meaningfully related to particular ideological contents. Thirdly, the form of the relationship between ambiguity tolerance and ideological conservatism within each content domain resonated strongly with an *a priori* definition of the meaning of the different contents within the ideological context of the study. It appeared as though increased ambiguity tolerance was associated with endorsing those contents which were more strongly censured within the ideological context (e.g., racism for the White sample).

Clearly, the type of regularities produced in these studies are not consistent with an empiricist ontology. Firstly, the regularities are incompatible with the account of psychological laws in terms of constant conjunctions of events. Just as it is incorrect to assume that cognitive traits are stable and generalized properties of psychology which predispose individuals to a particular ideological orientation, neither is it true that there are a number of different dimensions of ambiguity tolerance at a personality level (e.g., political, religious, familial) which predispose individuals to particular ideological orientations within those content domains. These dimensions and relationships are not ontological, but were produced by the investigative practice (e.g., factor analysis, sampling, etc.), and similar patterns cannot be expected in other contexts, or with other items (see p. 185). This, however, does not mean that the types of generative structures which produced the regularities in these studies do not exist beyond the context of this study. This anti-realist conclusion is a consequence of the empiricist ontic fallacy. Although similar conjunction of events are not to be expected across different contents or contexts, the generative mechanisms which brought about the present findings may indeed operate elsewhere as tendencies.

This introduces the second reason why the findings are incompatible with empiricism. The findings suggest a meaning- and praxis-based, rather than substance-like ontology. Empiricists

have shied away from invoking "metaphysical" entities to explain constant conjunctions, and have limited their laws to immediate cause-effect sequences attributable to the universal properties of 'things'. The relationship between cognitive style and ideological beliefs, for example, has been deemed a function of individual psychology. However, once it is demonstrated that there are different content-based dimensions of cognitive style, the empiricist must argue that individual psychology is (somehow) divided into different dimensions, thereby plunging him/her deeper into the metaphysical world s/he wishes to escape (see p. 132-135). Instead, one could argue that these different dimensions of ambiguity tolerance arise due to the differential meanings that the various authorities have by being embedded in different discourses and discursive practices. The subjects in Study 1 distinguished between political and conservative political authorities, not because their psychology is divided into these two dimensions, but because, within the context of the study, these domains have widely different meanings and material implications — the latter being associated with apartheid and the former with the 'new South Africa'. Similarly, the nature of the relationship between ambiguity tolerance and ideological conservatism within the different content dimensions is readily explicable with reference to the meanings of these contents within the context of the study. Individuals endorsing conservative contents within the liberal milieu tended to evaluate conservative authorities ambivalently because of increased levels of 'value conflict'. In other words, the regularities in the results give some clues to the nature of the underlying generative structures which produced these manifest tendencies. The results of Studies 1 to 3 suggest a praxis- and concept-dependent ontology.

In rethinking cognitive style in psychology, it has been necessary to develop a critique of the empiricist models which have dominated the literature. This critique has prompted a number of further questions: if cognitive style is not a property of individual psychology, what is it, and how should it be studied? Throughout the thesis I have used Frenkel-Brunswik's description of intolerance of ambiguity as a guide to defining cognitive style as a construct which is manifest in univalent or ambivalent evaluation of social "objects". However, what are the generative structures which underlie the manifest variability and organization of expressions of ambiguity tolerance? Chapter 6 embarked on the positive aims of providing initial answers to these questions, and shifting from an empiricist to a critical realist ontology — a movement from an substance-like individualistic ontology to a relational, praxis- and concept-dependent ontology.

Given that a shift to a critical realist ontology is required, what should scientific practice be like? For, if a radically new object of study is required, a new methodology is essential (Danziger, 1985). Bhaskar gives some direction. Firstly, he inverts the primacy which empiricists give to epistemology over ontology. He first proposes a "philosophical ontology" — i.e., "a general

account of the nature of the world" — and then leaves it to science to specify the structures which the world contains (1989b, p. 150). His philosophical ontology, though, has implications for scientific practice. His general account of the nature of the social world suggests that social structures are social-relation-dependent, praxis- and concept-dependent, and act as causal powers. The task of the social sciences is thus to develop causal accounts of events within the parameters of "a reality already brought under the same kind of material in terms of which it is to be grasped" (Bhaskar, 1989a, p. 21).

Second, Bhaskar makes specific recommendations regarding how a researcher might approach this task. At the outset he argues that, because decisive test situations are in principle denied the social sciences, they must be "exclusively explanatory" (1989a, chap. 1). By "explaining" an event or regularity he means that it must be brought "under a new scheme of concepts, designating the structures, generative mechanisms or agents producing it" (1989b, p. 90). This may be an empirical exercise which could follow one of two possible methodological paths which Bhaskar's Transformational Model of Social Activity respects:

...between the *social sciences*, which abstract from human agency, studying the structure of reproduced outcomes; and the *social psychological sciences*, which abstract from reproduced outcomes, studying the rules governing the mobilization of resources by agents in their everyday interaction with one another and nature" (Bhaskar, 1989b, p. 93, emphasis in original).

Bhaskar's model of social activity respects this methodological division of labour because it advocates a "duality of structure" between making and finding; where "society is the ever present condition and the continually reproduced outcome of human agency" (1989a, p. 35). Critical realism thus advocates a research strategy which aims to provide explanatory models of underlying generative structures which are productive and constraining of social life.

This is precisely the strategy which was employed in Chapter 6 in order to move from a philosophical to scientific ontology: that is, to complete the general account of the nature of the world with its specific structures (according to the science of the day). First, the manifest variability and regularity in ambiguity tolerance were brought under a new scheme of concepts — dialogics, rhetoric, contexts of joint action, speech genres, etc. — which designated the structures underlying the variability and regularity in expressions of ambiguity tolerance. In other words, I have sought these generative structures in the "mechanisms" (in a Bhaskaresque sense) of social construction. I must repeat that this model is derived from the transitive realm of theory and can in no way be seen as a reflection of reality (i.e., by the epistemic fallacy). Nor do I view rhetoric, dialogics, and speech genres as anything else but models (metaphors) by means of which we attempt to make sense of the world. There is no necessary reason (in reality) why this

particular content must be used to fill the ontological void besides the fact that I have been persuaded by arguments for a dialogical, constructionist reality.

However, "once a hypothesis of a causal mechanism has been produced in social science, it can then be tested quite *empirically*, though exclusively by reference to its explanatory power" (Bhaskar, 1989b, p. 85, emphasis in original). The rhetorical reality which I have suggested underlies the expression of ambiguity tolerance specifies reasons for variability and consistency in ambiguity tolerance with reference to the rhetorical/cognitive processes of categorization and particularization which thinkers must employ in developing contexts of joint action. Also, by drawing on the essentially compatible Bakhtinian notion of speech genres, the rhetorical account can produce a praxis- and concept-based explanation of the organization of intolerance of ambiguity within the rhetoric of the Right. The rhetorical model fits quite snugly both the structure of reproduced events and a Bhaskaresque "philosophical ontology".

The methodological strategy employed in Chapter 6 mirrors the distinction that Bhaskar has made between the methodologies of social sciences and the social psychological sciences. The first part of the study was concerned with the agentic, making features of cognition, and abstracted from reproduced outcomes while investigating the "rules governing the mobilization of resources". The variability in expressions of both tolerance and intolerance of ambiguity by the neo-fascist, Koos Vermeulen, was argued to be incompatible with the traditional psychological accounts of personality and right-wing thinking. This variability, however, was anticipated by a rhetorical model of cognition which proposes that, in the shifting contexts of joint action, all people must continually (re)construct reality by employing both rigid and flexible rhetorical styles. The second part of the study shifted attention to the "structure of reproduced outcomes". Without reverting to an empiricist ontology, an attempt was made to explain the organization of intolerance of ambiguity into right-wing rhetoric, while recognising the inherently variable nature of cognitive style. In contrast to empiricist accounts which argue that intolerance of ambiguity is a property of either the psychology of right-wing individuals (Adorno *et al.*, Rokeach, Sidanius) or the ideological group as a whole (Tetlock), the rhetorical account suggests that it is an emergent surface phenomenon originating, in the *historical rhetorical relations* between the Right and the Left.

Although it is not possible to establish an identity between the rhetorical account of cognitive style and reality itself, it is possible to conclude that a critical realist ontology, in terms generative rhetorical structures, provides a more adequate account of the manifest variability and regularity in ambiguity tolerance than an empiricist ontology. A rhetorical account of ambiguity

tolerance is compatible with both the philosophical ontology which suggests that the social reality is relational, historical, and praxis- and concept-dependent, and with the nature of reproduced outcomes which occur in varying contexts of joint action.

## **CRITICAL realism?**

At the beginning of the thesis it was noted that, in addition to the enormous impact that empiricism has had on the cognitive style literature, the conceptualization of cognitive style as a generalized property of individual psychology was fostered by moral/political objectives to which psychology was committed. As the early debate between Jaensch and Frenkel-Brunswik demonstrates (see chap. 1), powerful critiques of fascism and liberalism could be developed by assuming that cognitive traits were stable and pervasive properties of individual psychology that varied between individuals along a rational-irrational continuum. By demonstrating that irrational cognitive styles predisposed individuals to particular ideologies, these ideologies could be shown to be fundamentally irrational.

However, almost from the outset, this form of critique was argued to be spurious. As early as 1953, Brown argued that "the appropriate criticism of ethnocentrism is not that it is inefficient but that it is morally reprehensible...it will not do to conceal moral judgement with a weasel word like 'inefficient'" (p. 474). As Brown points out, attempts to ground political critique in establishing distinctions between the rationalities of alternate ideologies are futile because, as the radically different conclusions reached by Jaensch and Frenkel-Brunswik illustrate, political critique is related first and foremost to moral criteria and values. Furthermore, as I have argued, such a form of critique is itself ideological and conservative for it tends to justify the existing system by aiming critical attention on individual 'rotten apples' while leaving the social system untouched (see pp. 55-56).

In addition, Chapter 2 of this thesis has argued that there are fundamental incompatibilities, overlaps, and tensions between the empiricist imperative toward theoretical universalism and the value of moral/political critique. On the one hand, these two aspects of psychological research support each other for it is only on the empiricist assumption of a stable individual who manifests generalized personality traits that theorists could bridge the divide between identifying individual irrationality and criticizing ideological beliefs. On the other hand, political critique and theoretical universalism are deeply incompatible because it is not possible to establish a trans-historical and cross-cultural isomorphism between the theorized stable continuum of generalized cognitive traits

and the shifting specific beliefs which characterize an ideological orientation in different societies across history (see chap. 2). This creates a tension between political critique and universal theory. Critique demands a relationship between cognitive irrationality and specific (shifting) ideological contents, while universalism demands a relationship between cognitive traits and an unchanging definition of ideology — for example, in terms of deviance or extremism — which can accommodate various beliefs over historical and cultural context. Consequently, once variability in belief content is recognised, there are no grounds by which to theorize a stable and necessary relationship between irrational cognitive styles and specific ideologies. This is evident from Tetlock's (ambivalent) attempts to theorize individual variability in cognitive complexity. His rejection of the generalized trait thesis curtails all possibility of critique since it is no longer possible to maintain that individuals of certain ideologies are of a certain (irrational) cognitive type.

This state of affairs leaves us with a dilemma, for it questions the possibility of developing a programme of action research. Either one must endorse the fallacious empiricist ontology and continue in the form of spurious critique which Brown (1953) denounced, or one recognises individual, cultural, and historical variability in cognitive style and the relationship between certain cognitive styles and particular ideological contents within different contexts, and forgoes all possibility of critique. In other words, by recognising variability in cognitive style, Loye's (1977) "left-right system within us" is rendered illusory, and political critique based on the notion that certain ideologies attract (and are established by) irrational individuals is thwarted. The potential for interested action research after the mould of Adorno *et al.* (1950) becomes impossible both theoretically and empirically because, in addition to the lack of logical grounds, there is no decisive test situation whereby Humean regularities between style and content can be established.

As its name suggests, critical realism may assist us through this dilemma. This is achieved by adjusting the terms of critique. Bhaskar suggests that critique involves more than being able to say that a certain set of beliefs are false (or superficial) [or irrational]; it must involve "being able to give an account of the reasons why the false or superficial beliefs are held" (1989b, p. 87). This step, he adds, distinguishes the social sciences from the natural sciences, because "*the object that renders illusory beliefs necessary comes...to be criticised in being explained*" (*ibid.*, my emphasis). This is the precise strategy which was employed by Adorno *et al.* (1950). They argued that irrational fascist beliefs were held *because* of a deep-seated and irrational personality disposition. By invoking personality, they could explain both the reasons why irrational beliefs were held (dispositions), and why they were irrational (psychodynamic defences). In so doing,

though, Adorno *et al.* (1950), like their idealist and materialist predecessors (Hegel and Marx), had to rely on a universal, suprahistorical account of ideological beliefs. Adorno *et al.* (1950) substituted the ahistorical and universal principles of history offered by Hegel and Marx with equally ahistorical and universal principles of "thing-like" mind derived from empiricism. Critical realism, in contrast, recognises that social forms are concept-, activity- and time-space-dependent. It thus recognises variability in social forms, including the relation between the style and content of cognition. In addition, it acknowledges that "the social sciences are part of their own field of enquiry [which] means that they *must* be self-reflexive, critical and totalizing" (Bhaskar, 1986, p. 101, emphasis added).

While a few paragraphs in a concluding chapter cannot do justice to the complex issue of critique, it is worth noting that critical realism has two important implications for action research which distinguishes it from the type of critique based on irrational personality dynamics. Firstly, rationality is not self-evident and is not given by any abstract universal principle or law — e.g., intolerance of ambiguity is irrational. Moreover, with no Archimedean point, critique cannot be grounded in universals. Since social science is in a subject-subject relation with its subject matter, critical realism realizes that social science is intrinsically critical (non-neutral). Indeed, it is within these parameters that psychology has produced and employed principles of irrationality. Critical realism, however, does not view this as an obstacle to truth, but as a means to a critical theory. The inherently rhetorical nature of the social sciences provides the basis for critique, which can be used to argue against the oppressive and exploitative effects of particular beliefs and practices which are produced in certain contexts. This entails a move in the form of ideology critique; from one based on a scientific enterprise (i.e., establishing truth-falsity, facts) to a rhetorical enterprise which criticises and justifies discourses and practices in terms of their effects (cf. Eagleton, 1991; Parker, 1992).

The second point involves the means by which a critical realist science would sustain this critical rhetorical enterprise. In giving an account of the reasons why ideological beliefs are held, critique must accommodate the concept-, activity-, and time-space-dependence of social forms. In this context, critique must recognise the historical and contextual variability in the relation between specific cognitive styles and contents, and their ideological effects. There is nothing inherently conservative (or rigid or irrational), for example, in arguments for biological determinism. On the contrary, they can be used to radical ends as when gay rights activists oppose christian fundamentalism with the argument that "if God made us this way, how can He condemn us for it?". The potential for endless variability implies that a critique based on an empiricist epistemology (i.e., Humean regularities) will have no foundation as there exists no decisive 'test



situation' by which to establish *the* relationship between the style and content of cognition. This suggests that an alternative epistemology is required to sustain critique.

Despite the (a) rhetorical nature of establishing ideological effects and (b) the infinite potential for individual, cultural, and historical variability in the usage of particular ideological styles and contents, critical realism can sustain a critical enterprise for, being realist, it acknowledges the operations of social structures and the institutionalization of knowledge/practice. It recognises real limitations to the potentially infinite variability, and can thus account for the organization of particular forms of talk and discursive practices within certain discursive positions, while recognising variability. Critical realism can sustain critique since it transcends the need for modernist universals and facts, while steering away from the postmodernist conclusion that there is "no given order *in* reality at all" (Eagleton, 1991, p. 203, emphasis in original; Simons & Billig, 1994). While not seeking Humean regularities in material properties and processes of mind to ground critique, Bhaskar (1989b) argues that to be called "ideological", beliefs and practices must be necessary in some way. The purpose of emancipatory scientific enquiry then is explanatory, showing how ideological beliefs become necessary.

To make the discussion more concrete, consider the analysis of neo-fascist rhetoric reported in the previous chapter. Contra the traditional empiricist accounts in psychology, we cannot conclude that Vermeulen demonstrates a stable and general trait of intolerance of ambiguity which disposes him to fascism. This is to disregard the empirical reality of his flexibility in both the style and the content of his utterances. Moreover, it is politically dangerous for it ignores the potentially persuasive power of his thinking. This variability threatens the form and value of critique established on personality-based assumptions. The empiricist is plunged into relativism because there is no basis upon which to consistently link particular contents to a specific style since the association between the two is emergent in contexts of joint action (i.e., it may shift in response to unintended consequences of interaction). Consequently, no scientific means exists by which to locate rationality-irrationality within the self-contained individual, and hence within an ideological tradition. Anti-realist elements in the postmodernist tradition also succumb to a 'vicious relativism'. To accommodate variability they "invert the empiricist [representational] model" by suggesting that the signified follows obediently from the signifier (Eagleton, 1991, p. 208).

Bhaskar's critical realism, in contrast, "averts the non-identity of the objects of the transitive and intransitive dimensions" (1986, p. 99), and maintains a "gap" between these realms. This allows him to establish criteria for the adequacy of scientific explanation and sustain a critical theory.

If we do not, for instance, approach Vermeulen's intolerance of ambiguity as empiricists — seeking regularities in events — but approach it from an "exclusively explanatory" stance, we can, with reference to generative mechanisms in the intransitive realm, account for the organization in the style and content of Vermeulen's thinking. Intolerance of ambiguity and his neo-fascist arguments (for racial partition and violent means) are linked, through the conspiracy ideology, in a dialogical and historical relationship with radical and liberal themes and styles of argument. This permits critique, for an explanatory (as opposed to predictive) link may be established between generic (as opposed to numeric) talk ("discourses", Parker, 1992) and styles of argument.

Of course, this does not imply that there is (in itself) something irrational about particular styles (e.g., such as being less efficient). Bhaskar's critical potential it is not founded on this assumption. He suggests, instead, that in the demystification process of explaining how sets of beliefs gain epistemic significance, social sciences achieve their critical potential.

...the possibility of a scientific critique of lay (and proto-scientific) ideas, *grounded in explanatory practices based on the recognition of the epistemic significance of these ideas*, affords the human sciences an essential emancipatory impulse (1986, p. 169).

We can thus appreciate how Bhaskar can conclude that "the object that renders illusory beliefs necessary comes...to be criticised in being explained" (1989b, p. 87). In explaining why ideological styles, beliefs, and practices become necessary, we demystify them and open up possibilities for human emancipation.

In the analysis of Vermeulen's rhetoric it was possible to show how "the object" — conspiracy ideology with its style of intolerance of ambiguity — renders illusory beliefs (i.e., racist and violent contents) necessary (ideological). In explaining the rhetorical functions of intolerance of ambiguity (cognitive style), one is rendering the reality (truth value) of the contents non-necessary. In contrast to the politically naive manner in which personality theorists discount certain beliefs as irrational, critical realism recommends that we make serious attempts to explain how ideological beliefs gain epistemic significance. In this process we undertake Parkerian discourse analysis:

When we want to understand the function of particular discourses [as we do in an explanatory science], the way they position their subjects in relations of contempt and respect, of domination and subordination or of opposition and resistance, we pass quickly and ineluctably from conceptual critique to social critique (Parker, 1992, p. 37).

## A reflexive turn

In rethinking cognitive style in psychology, this thesis has aimed toward developing a critique of the empiricist models of cognitive style which have dominated the literature. This critique has taken two paths: first, on a metatheoretical level, it was argued that the development of theory has not followed the unitary, linear path anticipated by the empiricist (hypothetico-deductive) model of science; and second, it was argued that the theory and political critique which has been espoused by the literature has relied on the untenable assumption that cognitive style is a stable and generalized personality trait. The second line of critique has received detailed attention in this work because it has been the basis of theorizing the psychology of cognitive style. In this section I reflect on how a critical realist conceptualization of cognitive style — as an emergent feature of historical dialogical interactions — may assist in understanding the relationship between cognitive style and ideological contents within the cognitive style-content literature itself. I propose a dialogical account of theory development.

This brief discussion merely aims to augment Samelson's (1986, 1993) detailed analysis of the historical development of the concept of authoritarianism, and my earlier discussion of the unfolding theory of the relationship between cognitive style and content (Chapter 2). The present analysis supplements these studies of the changing theoretical content with an account of the changing rhetorical style ("tolerance of ambiguity") in the literature. The aim is to demonstrate the historically contingent nature of the relationship between style and content of theory. This serves to compensate for the static manner in which generic patterns of style may have been depicted in the synchronic analysis presented in Chapter 6.

Samelson concludes his analyses of the development of the concept of authoritarianism thus:

What strikes me most is the transformation of the problem [of authoritarianism] by different actors responding to different times and circumstances, as well as their varied fates in these settings: The development of the nuclear idea proceeded through the political spectrum from the far left, in the revolutionary and 'extreme' formulation by a communist Freudian activist [W. Reich], to milder Marxist-socialist, and incipiently empirical, versions of Fromm and the Institute [Frankfurt School], on to the liberal American social scientists at Berkeley and their followers, to end up in the value-free empirical data-crunching of the late 1950's, eventually jumping tracks to the media and the neo-conservative camp (Samelson, 1993, p. 41).

Samelson reached this conclusion by tracing the content of the irrational authoritarian and its lineage of antitheses — through revolutionary, liberal, to conservative moderate — over its history. He found theoretical change to be closely linked to shifting historical circumstances, with a concern with the stability of the capitalist state being superseded with disquiet over fascism, and later communism and totalitarianism. Samelson analysis thus concurs with Gergen's (1973)

conclusion that contemporary social psychological theories are "firmly wedded to historical circumstances" (p. 315).

The discussion in Chapter 2 argued that the cognitive style-content literature has witnessed similar changes in response to shifting political concerns. Where Adorno *et al.* (1950) sought to locate irrational cognitive styles in the Right, with the growing threat of communism fostered by the Cold War, Shils, Eysenck, and Rokeach sought cognitive irrationality in the political extremes, both Left and Right. As the Cold War was drawing to a close, the 1980's witnessed a significant change in theory. An overriding concern with the critique of any particular ideological constellation is not to be found in the work of either Sidanius and Tetlock. Research had become marked by "value-free empirical data-crunching" (Samelson, 1993) and a "political-controversy-avoiding bias" (Etheredge, 1994), with irrational individuals or situational responses the only possible objects of critique. Sidanius celebrates a liberal humanist (narcissistic) view of the self when he argues that intolerance of ambiguity leads "intellectually weaker" conformists to comply with mass opinion. By recognising individual variability in cognitive style, Tetlock completes the anti-critical turn by suggesting that only situationally inappropriate cognitive styles are to be denounced. The negation of the early spirit of the authoritarianism literature — i.e., the absolute elimination of any critical potential — is neatly captured by Tetlock (1994):

...we make a grave mistake when we allow our political values and preferences to colour our psychological characterizations of cognitive style. A cognitive style that in one context we applaud as balanced, judicious, and sophisticated we might deplore in another as weak, indecisive, and confused (p. 526).

To the extent that politics has shaped theory, however, it has done so only against a shifting scientific backdrop. In addition to changing political interests, Chapter 2 argued that changing scientific imperatives such as value freedom and theoretical universalism have also impacted on and shaped theoretical content. Specifically, a increasing concern with theoretical universalism is evident as the literature developed. Although Billig (1982) argues quite correctly that in places Adorno *et al.* (1950) aspired to theoretical universalism, this empiricist value was not of overriding interest to them. On the contrary, Adorno *et al.* (1950) were engaged in the single task of theorizing the emergence of a new "anthropological species" (Horkheimer, 1950) — the fascist (authoritarian) personality — and were interested in establishing a necessary relation between the content and irrational cognitive style of this new species. Only with Rokeach (1956a, 1960) does one detect an explicit concern with developing universal and trans-historical theories of the relationship between cognitive style and content. The trend towards universalism was only completed, however, by Sidanius, whose model "has the major theoretical advantages in that it avoids the time and culture boundedness of conventional studies of belief systems" (Ward, 1986, p. 142).

As it turned out, the values of universalism and critique were deeply incompatible. To achieve a universal theory, theorists were required to unhinge cognitive style from content since it was not possible to establish an isomorphic relationship between a universal continuum of cognitive traits and the changing belief contents which are endorsed by a single ideological tradition over time and context. Instead, ideological orientation had to be defined in universal terms as deviance from modal beliefs (i.e., extremism). However, by so doing, all potential for political critique was undermined since, within different societies and historical epochs, different contents could characterize extremism. Any specific beliefs (e.g., fascism, liberalism, communism) could feasibly be as irrational as any other, depending on the context.

In contrast to Samelson, who leaves the impression of a gradual, if somewhat discontinuous, theoretical development from politicised to value-free empiricist accounts of authoritarianism, I see an integral relationship between the demise of critique and the rise of full-blown empiricist approaches to authoritarianism. Change occurred not only because theorists replaced political values with value freedom, but because *it was only possible* to establish universal theories once political circumstances had changed so that there was no overarching 'enemy' which necessitated critique.

The tension between historico-political circumstances on the one hand, and the relative importance of critique and theoretical universalism on the other, provides the background against which intolerance of ambiguity within the cognitive style literature may be approached. For Adorno *et al.* (1950), the tension was only latent. *The Authoritarian Personality* was the first attempt to use empirical methods to confirm that a relationship between ideological beliefs and irrational cognitive style could be established. At this stage, it was of little concern whether intolerance of ambiguity was associated with different contents over history, because it *was* associated with fascist beliefs, which were thereby shown to be irrational. Adorno *et al.* (1950) could therefore be relatively unambivalent in their politicized programme of action research. It is only surprising how quickly historical change allowed the theory of a necessary relation between the style and content of cognition to be turned against its original authors. While adopting the same theoretical framework as Adorno *et al.* (1950), Shils and Eysenck argued that cognitive irrationality marked both fascist and communist beliefs.

It was Rokeach who first made explicit the need for a universal theory. This he attempted to do by purging from his definition of cognitive style (dogmatism) all references to ideological contents, and defining ideological orientation in terms of deviance from modal beliefs, rather than specific contents. However, Rokeach was before his time as it were. The Cold War was still

raging and there was no space for a theory which potentially legitimated communism (or fascism) within mainstream American psychology. Consequently, Rokeach's theory is riddled with ambiguities as he attempts to marry a universalistic theory, purged of references to ideological content, to a critical theory, linking dogmatism to specific ("anti-democratic") contents (see pp. 39-40). Only toward the close of the Cold War, with no distinct 'enemy' on the political landscape, could Sidanius properly achieve Rokeach's aims, purge his definition of cognitive style and ideological orientation of all references to specific ideological contents, and propose an unambivalently universal theory. Sidanius, however, does not escape completely from hedging and particularization. To ensure that his theory does not exonerate racists as intellectually stronger and sophisticated individuals in liberal contexts, he applies a completely different theory to racist beliefs than all other beliefs. Even this form of ambivalence is absent from Tetlock's universalistic account of individual variability in cognitive style. For Tetlock, it is not ideologies or individuals, but only situational responses which may be more functional (rational) than others.

I agree with Samelson that an analysis of the authoritarianism literature allows a glimpse, beyond a simple "historical relativism", of the dynamics of historical change in the perspectives of the researchers. It is immediately clear that this change in perspectives takes place rhetorically as each researcher has criticized others and justified his/her own views (cf. Simons, 1990; Nelson & Megill, 1986). The dynamics underlying this change are dialogical (cf. Marková & Foppa, 1990). Just like dialogical exchanges in immediate face-to-face contexts of joint action, theory development takes place in the shifting seascapes of joint action, as an exchange of utterances (academic papers, books, etc.), each a response to previous and future utterances. As such, theory development cannot be accounted for purely in terms of its accuracy in representing the reality it is supposed to explain. However, neither can a theoretical utterance be regarded as a "completely free combination" of forms of language (Bakhtin, 1986, p. 81). Rather, according to a dialogical account, theory development is dependent upon and constrained by the generic form of language with which it is communicated in developing historical and political contexts. The developing nature of the context, and its impact on theory, is perhaps more clear here than in face-to-face interactions because of the dramatic nature of historical change.

From this dialogical perspective, theoretical change cannot be seen as a unitary, linear development as scientists approach truth closer and closer. Instead, theoretical developments have been determined by the changing contexts within which they have taken place, the changing social phenomenon under investigation, and the generic forms of language with which they are communicated (i.e., scientific and critical discourses). Quite clearly, the dramatic reversals of *the* model of the relationship between cognitive style and content offered over different historical

contexts should convince anyone that *The Authoritarian Personality* and its fate are not very compelling illustrations of the progressive accumulation of knowledge (Samelson, 1986). However, these reversals are not mysteriously connected to historical developments as some mirror image or reflection. On the contrary, they are communicated in generic form as utterances, justified and defended as other positions are criticized.

Theoretical change is rhetorical, and the development of the idea of authoritarianism can be understood as such. Over the period 1950-1990, it can be understood as a discourse whose complex development — i.e., mutually supporting and contradictory themes — has taken place within the 'parameters' of two axes of knowledge: empiricist science and politics. The work of Samelson and the present analysis would suggest that the literature can be characterized by a shift from one axis to another — drawing on an empiricist code of justification and critique in place of an earlier a political code — from a critique of fascism and communism to a critique of other psychological theory on scientific grounds. This shift is evident on two levels. First, the task of Adorno *et al.* (1950) was explicitly political whereas Tetlock's is explicitly "value free". Second, since "each speech genre in each area of speech communication has its own typical conception of the addressee" (Bakhtin, 1986, p. 95), the shift can be ascertained from the changing nature of the addressee: from a political opponent (e.g., fascists, Jaensch, Marxists), to a politicized scientific opponent, practising a biased science. It was Rokeach — with his universal and critical interests — who was caught in the twist of this shift, and his theory of dogmatism contains the strongest simultaneous expression of both codes. Accordingly, it is Rokeach's theory which manifests the highest degree of ambivalence between the contrary themes of theoretical universalism and political critique.

In addition to demonstrating the historically contingent nature of the style/'rationality' of theory development, a rhetorical analysis of the literature allows some insights to be drawn concerning the nature of the relationship between the style and content of cognition. The cognitive style literature may be turned back on itself, as an illustration of what it is not. Firstly, the relationship is historical in nature. Despite the liberal, anti-racist contents shared by Rokeach, Sidanius, and Tetlock, they differ remarkably in both their theoretical accounts and the types of ambivalences which they encountered and expressed. Second, change in the relationship over time is contingent upon shifting sociopolitical circumstances (dialogical contexts of joint action). These rhetorical features of the relationship between cognitive style and content suggests that, despite all concerted efforts, any universal theory on the nature of the relationship between cognitive/ideological style and content may be beyond reach. Definitely, the reasons for Rokeach's ambivalence have nothing to do with his psychology. It is related to type of argument he was supporting within

specific sociohistorical circumstances. Ambiguity tolerance is an emergent feature (tendencies) of rhetorical structures.

## Future directions

Finally, given the non-unitary nature of the scientific endeavour and the empirical reality of massive individual variability in expressions of cognitive style, what should be the future direction of investigations into cognitive style and the cognitive style-content relationship? Mainstream literature is beginning to acknowledge individual variability in cognitive style, and has warned of the dangers of treating cognitive style and a simple unidimensional construct (e.g., Furnham, 1994; Scott *et al.*, 1979; Sidanius, 1985; 1988a; Tetlock *et al.*, 1993). Nevertheless, many researchers have remained committed to a personality-based account of cognitive style, albeit a more complex one. By generating more complex factor structures, they have created more "faculties of mind" by typical empiricist means — the ontic fallacy — arguing that there are different dimensions of personality, each important of (empiricist) study in themselves. It must be recognised, however, that the more complex the factor structure of personality has become, the more complex the reality, and the more metaphysical the ontological assumptions.

This situation within psychological science is similar to that in German philosophy which Nietzsche's (1973) deplored for, "always creat[ing] the world in its own image" (p. 39):

Kant asked himself: how are synthetic judgements *a priori possible*? — and what really did he answer? *By means of a faculty*... People lost their heads altogether on account of this new faculty, and the rejoicing reached its climax when Kant went on further to discover a moral faculty in man (*sic*)... The honeymoon time of German philosophy arrived; and the young theologians...went straight away off into the bushes — all in search of 'faculties'. And what did they not find... (pp. 41-42, emphasis in original).

Similarly, since the scientific discovery of a unitary personality dimension of authoritarianism, psychologists went straight away off in search of new dimensions. As their statistical technology has improved, so they have found more factor structures and, correspondingly, "dimensions of personality" — including 2, 3, 5 (or is it 6?), 8, 12, and 16 factors (see Cattell, 1995). On closer investigation, each dimension is itself comprised of further dimensions — as is intolerance of ambiguity (or Openness to Experience) — which are further subdimensions of personality. In my opinion, more personality studies and increasingly complex factor structures are not likely to assist in understanding the complex and subtle relationship between cognitive style and content more than it has done in the past. We need to move away from creating the world technologically in our own image.



A second possible line of study would be to use measures such as the AAT scale to determine the manner in which different objective contextual conditions impact on variability in ambiguity tolerance over different content domains. By abstracting from reproduced outcomes — manifest patterns of associations between ambiguity tolerance and ideological contents in different contexts — it may be possible to investigate the functioning of the underlying generative mechanisms within different objective social conditions. However, quantitative methods will encounter difficulties in capturing the subtleties of structure underlying any manifest relationship between cognitive style and content. Such research will inevitably tend toward either the empiricist epistemic fallacy — entrenching dualities between context (as "situation") and content (as "attitudes") and cognitive style (as multidimensional self-contained individual), and sliding into universalist theory — or encounter difficulties in speculating about the nature of the generative mechanisms underlying the emergent patterns of ambiguity tolerance. The AAT scale was a useful means to demonstrate the profound individual variability in ambiguity tolerance, and question empiricist ontological assumptions. In addition, the research findings derived from this scale gave some clues to the possibility of meaning-based ideological structures which underlie expressions of ambiguity tolerance. However, it is unlikely that this measurement procedure will assist in a close study of the operation of the generative mechanisms, and will certainly be of little use in a critical programme of action research.

The way forward is to address "the basic problem at the core of the human sciences: how to understand and deal with the interdependencies between individual lives and their — our — societies, caught up in concrete historical developments that impinge on...all of us" (Samelson, 1993, p. 42). This is a political enterprise concerned with human emancipation, and which endorses the values underlying the work of the Frankfurt School in their original interest in developing a theory of authoritarianism. Moreover, for the reasons outlined above, it is not an empiricist project. I have argued that a critical realist philosophy of science may assist in both investigating cognitive style and in establishing links between the stylistic features of cognition and historical ideological contents. A dialogical, Billigian/Bakhtinian framework is useful in this regard because it can accommodate both the change and stability (making-finding, variability-organization, agency-structure) of social reality. In my view, the stylistic aspects of cognition/rhetoric are central features of social relations. The study of cognitive style may assist in explaining an important aspect of the manner in which both change and stability of social structures are (humanly) realized.

I share Bhaskar's sanguine conclusion that:

...insofar as there has been a *real advance* in recent analytic philosophy of the human sciences, it lies in the recognition of the significance of the condition that (wo)man is a

self-interpreting and self-motivating animal, a member of a story-telling species, whose language, beliefs, and stories are in some manner necessary for and productive of his or her life" (1986, p. 160, emphasis added).

Perhaps, once having recognised the necessary, constraining and productive nature of beliefs and the style with which they are communicated, the project of understanding the interdependencies between individual lives and their — our — societies, will shift away from empiricist dualisms and universals to a analysis and critique of discursively reproduced (dialogical) subjectivities.

My view of the way forward is exactly contrary to empiricist council toward a unitary science (e.g., operationalization, falsification). Many different perspectives and views of cognitive style may be adopted by different critical investigations of the stylistic features of rhetoric. Here I have investigated categorization and particularization in Vermeulen's speech and the change in historical conditions underlying theoretical ambivalence in the cognitive style-content literature. The study of cognitive style may be broadened to include the diverse ways in which tolerance/intolerance of ambiguity serves to (re)produce "the *epistemic significance*" of ideological ideas and practices. Also, although I have focused on intolerance of ambiguity, ambivalence and 'double talk', there are other stylistic features of rhetoric which may be fruitfully analyzed, including the use of analogy and metaphor, and 'strong views', etc. (cf. Bakhtin, 1986; Perelman & Olbrechts-Tyteca, 1969). Each enquiry into the "dynamics of dialogue" can only serve to deepen our understanding of our social world, for according to Bakhtin (1986, p. 170), "there is neither a first nor a last word".

# References

*Until then I had thought each book spoke of the things human or divine, that lie outside books. Now I realized that not infrequently books speak of books: it is as if they spoke among themselves. In the light of this reflection, the library seemed all the more disturbing to me.*

(Umberto Eco, *The name of the rose*, p. 286)

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# Appendix A

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## Summary of Sidanius' research of the relationship between cognitive style and sociopolitical beliefs

Sidanius has used three personality measures of cognitive style in his research: the dispositional measures of intolerance of ambiguity, and cognitive functioning; and the experiential measure of political sophistication. His earlier work, which is reviewed here, investigated the relationship between dispositional variables — intolerance of ambiguity and cognitive functioning — and sociopolitical beliefs. Linear and curvilinear analyses were performed to ascertain the form of the relationship between cognitive style and sociopolitical beliefs, and to distinguish between the predictions of (a) the theory of authoritarianism (negative linear relationship), (b) extremism theory (n-shaped curvilinear relationship), and (c) context theory (v-shaped curvilinear relationship).

### Operational measures

Sidanius (1978a, 1978b, 1985) employed *Budner's (1962) intolerance of ambiguity scale* as a measure of cognitive complexity. Factor analysis of the Budner scale yielded seven different dimensions of tolerance/intolerance of ambiguity: need for certainty, an uninterpretable factor, self-confidence, need for security, fear of initiative, intolerance of ambiguity, and need for the familiar (Sidanius 1978a, 1978b).

*The Political Prediction Test* (Sidanius 1978b, 1985, 1988b; Sidanius & Lau, 1989) requires respondents to predict levels of political violence in a number of countries in different parts of the world (e.g., Latin America & Western Europe), given several relevant social indicators of violence such as the proportion of minorities in each country and the per capita income of the

population. This test yields five indices of cognitive functioning:

1. Cognitive Complexity ( $CC_p$ ): the number of underlying variables used in predicting political violence.
2. Cognitive Coping: the strength of linear association between stimuli and response.
3. Cognitive Flexibility ( $CF_{p1}$ ): the variability in violence judgements between countries in the two different parts of the world.
4. Cognitive Flexibility ( $CF_{p2}$ ):  $CF_{p1}$  multiplied by cognitive coping.
5. Predictive Accuracy: the degree to which the predictions correspond with actual levels of violence in the respective countries.

*The Object Sorting task* (Sidanius, 1978b) requires subjects to sort 15 different countries into groups on the basis of some criterion. Two indices of cognitive functioning are derived from this task:

1. Cognitive Complexity ( $CC_g$ ): the number of groups produced by each subject.
2. Cognitive Flexibility ( $CF_g$ ): the total number of countries with membership in more than one group, divided by the total number of groups.

*The Similarity Rating task* (Sidanius & Ekehammar, 1976, 1977) solicits similarity ratings of 36 different pairs of political parties. These are then submitted to multidimensional scaling analysis. Although three different indices of cognitive differentiation were derived from this procedure, only Latent Differentiation, the number of underlying dimensions as identified by the scree test, was found to be of importance.

*The Left-Right Rating task* (Sidanius & Ekehammar, 1976) consists of rating nine political parties with respect to their position on a political left-right continuum. Two significant indices of cognitive functioning were defined on the basis of this task:

1. Cognitive Range: the width of the judgemental field.
2. Cognitive Centring: the midpoint of the subjects judgemental field.

Sidanius has operationalized *sociopolitical beliefs* by:

1. Assessing political party support.
2. Measuring self-ranking on a conservatism-liberalism dimension.
3. A measure of conservatism modelled after that devised by Wilson and Patterson (1968). This conservatism scale has been factor analyzed to yield five dimensions of conservatism: political-economic conservatism, racism, religion, sexual repression, and authoritarian aggression (Sidanius, 1978a; Sidanius and Ekehammar, 1976).

## **Associations between measures of cognitive style**

Budner (1962) has defined intolerance of ambiguity as "the tendency to perceive ambiguous situations as sources of threat" (p. 29). These are situations characterized by "novelty, complexity, or insolubility". Although intolerance of ambiguity, as defined by Budner, appears conceptually distinct from cognitive functioning, Sidanius (1985) has suggested that the Political Prediction Test and the Object Sorting Task "meet the requirements" of ambiguous situations (p. 649), and has thus used the Budner scale as an external criterion of construct validity of the various indices of cognitive functioning (Sidanius, 1985, 1988a).

Although statistically significant relationships were found between five of the cognitive functioning indices and the total Budner scale and/or Factor 1 of the scale (need for certainty and uniformity), these correlations were modest to low (Sidanius, 1978b, 1985). Furthermore, none of the other Budner factors correlated with any of the indices of cognitive functioning. Thus, while there is evidence suggesting some commonality between intolerance of ambiguity and cognitive functioning, the relationship is weak, and at most, tentative.

Besides the relationships between the Budner scale and the indices of cognitive functioning, Sidanius (1976, 1978b, 1985) has commonly found weak relationships ( $.10 \leq r \leq .25$ ) between different indices of cognitive style. More concerning, though, is the complete lack of index convergence between different measures of cognitive complexity ( $CC_p$  and  $CC_g$ ), and different measures of cognitive flexibility ( $CF_{p1}$ ,  $CF_{p2}$ , and  $CF_g$ ) (Sidanius, 1978b, 1985). Finally, factor analysis of a number of different indices of cognitive style has disclosed six different factors underlying these indices (Sidanius 1978b). Overall, Sidanius' empirical evidence reveals little generalizability from one index of cognitive style to another.

## **Associations between intolerance of ambiguity and sociopolitical beliefs**

Sidanius has investigated the relationship between intolerance of ambiguity and sociopolitical beliefs with two separate samples: One comprised of 46 Swedish university students (Sidanius, 1978b); and the other, of 195 Swedish high school students (Sidanius, 1978a).

Of the seven correlational analyses between general conservatism and intolerance of ambiguity investigated in the 1978b study, three were significant (see Table A.1). Two of these relationships were congruent with the theory of authoritarianism, while the relationship between Factor 3 of

the Budner scale and conservatism suggested that conservatives were more self-confident and tolerant of ambiguity than moderates and liberals.

**Table A.1:** Correlation coefficients between indices of tolerance/intolerance of ambiguity and ideological conservatism

	Budner total: intolerance of ambiguity	Budner (F1) intol. of uncertainty	Budner (F2) uninterpreted	Budner (F3) self- confidence	Budner (F6) intolerance of ambiguity	Budner (F7) need for the familiar
General conservatism	1978b: $r = .30$ $p < .05$ 1978a: $r = .27$ $p < .0002$	1978b: $r = .45$ $p < .01$		1978b:* $r = .26$ $p < .025$	1978a: $r = .29$ $p < .0002$	1978a: $r = .20$ $p < .01$
Political- economic conservatism		1978a:* $r = -.16$ $p < .05$			1978a: $r = .25$ $p < .01$	
Racism	1978a: $r = .28$ $p < .01$				1978a: $r = .31$ $p < .01$	1978a: $r = .25$ $p < .01$
Sexual repression					1978a:* $r = -.20$ $p < .01$	
Authoritarian Aggression	1978a: $r = .19$ $p < .05$	1978a: $r = .34$ $p < .0002$	1978a:* $r = -.16$ $p < .05$			

\*Direction of linear association contrary to that expected by the theory of the authoritarian personality.

Only twelve of the 48 correlations from the 1978a study were significant: the summed Budner scale, Factor 1, Factor 6, and Factor 7 were found to be consistently related to sociopolitical beliefs (see Table A.1). Most of these relationships were in the direction predicted by the theory of authoritarianism.

The results of the trend analyses revealed a mixed pattern of linear and curvilinear relationships between intolerance of ambiguity and sociopolitical beliefs (see Table A.2). Although, in comparison with the large number of possible relationship which were examined, relatively few curvilinear trends were found. All but one of the curvilinear relationships were in the direction predicted by context theory.



**Table A.2:** Trend analysis of indices of tolerance/intolerance of ambiguity and ideological conservatism.

	Budner total: intolerance of ambiguity	Budner (F1) Need for Certainty	Budner (F4) Need for Security	Budner (F5) Fear of initiative	Budner (F6) Intolerance of ambiguity	Budner (F7) Need for familiar
Political party preference			1978a: curv. $p < .007$ $\eta = .30$			
General conservatism	1978a: lin. $p < .0001$ $\eta = .26$ curv. $p < .01$ $\eta = .24$	1978a: curv. $p < .01$ $\eta = .25$			1978a: lin. $p < .0001$ $\eta = .28$	1978a: lin. $p < .002$ $\eta = .22$
Political- economic conservatism		1978a: <sup>*</sup> lin. $p < .012$ $\eta = .18$			1978a: lin. $p < .0005$ $\eta = .25$	
Racism	1978a: lin. $p < .0001$ $\eta = .29$				1978a: lin. $p < .0004$ $\eta = .29$	1978a: lin. $p < .001$ $\eta = .26$ curv. $p < .01$ $\eta = .20$
Authoritarian Aggression	1978a: lin. $p < .004$ $\eta = .20$	1978a: lin. $p < .0001$ $\eta = .32$		1978a: <sup>**</sup> curv. $p < .05$ $\eta = .21$		

<sup>\*</sup>Direction of linear association contrary to that expected by the theory of the authoritarian personality.

<sup>\*\*</sup>Direction of curvilinearity predicted by extremism theory.

## Associations between cognitive functioning and sociopolitical beliefs

Sidanius and Ekehammar (1976) studied the relationship between cognitive functioning and sociopolitical beliefs among 105 Swedish psychology students. Of the 48 correlations between different indices of cognitive functioning and sociopolitical beliefs, only 10 were significant (see Table A.3). The direction of these relationships are all in keeping with the theory of authoritarianism, with higher conservatism being associated with lower levels of cognitive functioning. Sidanius (1985) tested the relationship between cognitive functioning and sociopolitical beliefs with a sample of 195 Swedish high school students. Seven of the 36 correlations were significant and their direction conformed to the predictions of authoritarianism theory (see Table A.3). General conservatism, racism, and political and economic conservatism appeared to be the most important dimensions of sociopolitical beliefs which are related to cognitive functioning.

**Table A.3:** Correlation coefficients between indices of cognitive functioning and conservative sociopolitical beliefs

	Cognitive centring	Cognitive flexibility (CF <sub>pl</sub> )	Cognitive flexibility (CF <sub>p2</sub> )	Cognitive flexibility (CF <sub>g</sub> )	Cognitive range	Cognitive differentiat ion
General conservatism	1976: <i>r</i> = -.40 <i>p</i> < .001	1985: <i>r</i> = -.19 <i>p</i> < .01	1985: <i>r</i> = -.16 <i>p</i> < .05			1976: <i>r</i> = -.31 <i>p</i> < .05
Political- economic conservatism	1976: <i>r</i> = -.49 <i>p</i> < .001				1976: <i>r</i> = -.22 <i>p</i> < .05	1976: <i>r</i> = -.30 <i>p</i> < .05
Racism	1976: <i>r</i> = -.23 <i>p</i> < .05	1985: <i>r</i> = -.16 <i>p</i> < .05	1985: <i>r</i> = -.15 <i>p</i> < .05			1976: <i>r</i> = -.21 <i>p</i> < .05
Religious conservatism	1976: <i>r</i> = -.24 <i>p</i> < .05					1976: <i>r</i> = -.25 <i>p</i> < .05
Sexual repression			1985: <i>r</i> = -.15 <i>p</i> < .05	1985: <i>r</i> = -.17 <i>p</i> < .05		
Authoritarian Aggression	1976: <i>r</i> = -.29 <i>p</i> < .05	1985: <i>r</i> = -.16 <i>p</i> < .05				

Table A.4 reports the results of the trend analyses between the indices of sociopolitical beliefs and cognitive functioning. General conservatism and political and economic conservatism were the only indices of sociopolitical beliefs which were related to cognitive functioning. Although most of the trend analyses yielded purely linear relationships, curvilinear relationships for cognitive complexity, cognitive range and cognitive differentiation were in the direction predicted by context theory.

**Table A.4:** Trend analysis of indices of cognitive functioning and sociopolitical ideology.

	Cognitive Centring	Cognitive complexity	Cognitive range	Cognitive differentiation
Political Party Preference	1976: linear: $p < .0001$ $\eta = .54$			
General conservatism	1976: linear: $p < .0001$ $\eta = .40$	1985: linear: $p < .053$ $\eta = .14$ curv. $p < .047$ $\eta = .21$	1976:  curv. $p < .03$ $\eta = .30$	1976: linear: $p < .01$ $\eta = .25$ curv. $p < .03$ $\eta = .29$
Political and economic conservatism	1976: linear: $p < .0001$ $\eta = .48$		1976:  curv. $p < .0001$ $\eta = .40$	1976: linear: $p < .002$ $\eta = .31$

## Summary and conclusions

From Sidanius' work, it appears as though intolerance of ambiguity is related to more dimensions of sociopolitical ideology than cognitive functioning. These results should, however, be viewed as suggestive rather than definitive. Overall, very few relationships were significant in comparison to the number of relationships examined. Generally speaking, the significant associations were weak to moderate in strength. Many of the significant results obtained in one study were not replicated in other studies. Furthermore, the overall pattern of results is not explicable by any theory. Why, for example, is Budner Factor 1 not related to racism and sexual repression, whereas Factor 6 is related to these two dimensions of sociopolitical beliefs, but not authoritarian aggression? Sidanius' research does, however, underscore the necessity of studying different dimensions of sociopolitical beliefs, and cognitive functioning and intolerance of ambiguity. Clearly, some aspects of sociopolitical beliefs are not related to either cognitive functioning or intolerance of ambiguity in the same manner as other dimensions.

While the predictions of context theory do receive some tentative support, most of the results were congruent with the theory of authoritarianism. Very little support was found for extremism theory. However, a number of findings contravene Sidanius' predictions. Contrary to context theory, linear relationships were found between indices of cognitive functioning and political and economic conservatism (see Table A.4), and a curvilinear relationship was found to exist between racism and Budner Factor 7 (see Table A.2).

# **Appendix B**

## **Questionnaire 1**

The following is a study of what university students think and feel about a number of important social and personal questions. We have tried to cover many different and opposing points of view; no matter what your answer to the various questions, you can be sure that many people will feel the same as you.

As this questionnaire is the first component of a two-part study, you are requested to provide your name. You are assured of the strictest confidentiality. The questionnaire will be read by the researcher only. This is a scientific investigation independent of all political, religious and other ideological persuasions. You are encouraged to answer all questions openly. Thank you for your cooperation. Please answer all questions.

# SECTION 1

Please give the following details.

1) Surname \_\_\_\_\_

2) First names \_\_\_\_\_

3) Sex

Male	
Female	

4) Age (in years) \_\_\_\_\_

# SECTION 2

Please answer the following by placing a cross [ ] in the appropriate boxes.

1) Which Political Party would you most likely and least likely support? (select only one party in the "most likely" column and one party in the "least likely" column).

	Most Likely	Least Likely
National Party (NP)		
African National Congress (ANC)		
Afrikaanse Weerstand Beweging (AWB)		
Inkatha Freedom Party (IFP)		
South African Communist Party (SACP)		
Democratic Party (DP)		
Azanian Peoples Organization (AZAPO)		
Conservative Party (CP)		
Pan African Congress (PAC)		

2) To which so-called "Population Group" do you belong?

Black	
White	
Coloured	
Indian	
Asian	
Other (specify):	

3) What is your Home Language?

Afrikaans		
English		
Oriental language		
Sotho	Southern Sotho	
	Tswana	
	Northern Sotho (Pedi)	
Nguni	Swazi	
	Ndebele	
	Xhosa	
	Zulu	
Shangana/Tsonga		
Venda/Lemba		
Other (specify):		

4) How would you evaluate your political opinions? (choose one of the following categories).

Very Liberal	
Liberal	
Slightly Liberal	
Moderate	
Slightly Conservative	
Conservative	
Very Conservative	

5) How strongly do you hold your political views?

Not at all

Very strongly

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

6) How much interest do you take in politics (eg. reading political news, discussing political issues)?

Very little

Very much

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

7) How much interest have you taken in the negotiation process (e.g., following news reports, discussions with friends, etc.)?

Very little

Very much

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

8) Would you take part in demonstrations and strikes if you felt the negotiation process was biased or unfair?

Most certainly

Certainly not

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

SECTION 3

1) How often have you attended religious services in the last year?

Never	
Once or twice	
Three to six times a year	
Once or twice a month	
Once a week	
Two or three times a week	

2) Which of the following best describes your practice of prayer or religious mediation?

Prayer is a regular part of my daily life.	
I usually pray during times of stress or need, but rarely at any other time.	
I pray only during formal ceremonies.	
Prayer has little importance in my life.	
I never pray.	

3) When you have a serious problem, how often do you take religious advise or teaching into consideration?

Almost always	
Usually	
Sometimes	
Rarely	
Never	

4) How much influence would you say that religion has on the way that you choose to act and the way that you choose to spend your time each day?

No influence	
A small influence	
A fair amount of influence	
A large influence	

5) During the past year, how often have you experienced a feeling of religious reverence or devotion?

Almost daily	
Frequently	
Sometimes	
Rarely	
Never	

6) Do you agree with the following statement? Religion gives me a great amount of comfort and security in life.

Strongly disagree	
Disagree	
Uncertain	
Agree	
Strongly agree	

7) Which of the following statements comes closest to your belief about God?

I am sure that God really exists and is active in my life.	
Although I sometimes question God's existence, I do believe in God's existence and that God knows me as a person.	
I don't know if there is a personal God, but I do believe in a higher power of some kind.	
I don't know if there is a personal God or a higher power of some kind, and I'm not sure that I will ever know.	
I don't believe in a personal God or a higher power.	

8) Which one of the following statements comes closest to your belief about life after death?

I believe in a personal life after death, a soul existing as a specific individual.	
I believe in a soul existing after death as part of a universal spirit.	
I believe in life after death of some kind, but I really don't know what it would be like.	
I don't know whether there is any kind of life after death, and I don't know if I will ever know.	
I don't believe in any kind of life after death.	



## SECTION 4

It is assumed here that your attitude toward any given authority is a mixture of both likes (respect) and dislikes (disrespect), given different situations. Give two scores for each of the following authorities or authority figures, one indicating the level that you sometimes like (respect) the authority, the other the level of your possible dislike (disrespect).

Please circle the appropriate figures. Give your immediate reaction. The best answer is your personal opinion.

**Example 1:** If on occasions you truly respect the American government and support their decisions, but on other occasions you hold them in contempt. Then you could answer:

### The American Government

Like/respect

Not at all                      0 1 2 3 4 5 6 7 8 9 **10**                      Very much

Dislike/disrespect

Not at all                      0 1 2 3 4 5 6 7 8 9 **10**                      Very much

**Example 2:** If you respect Major Bantu Holomisa completely and support him at all times, then you may answer:

### Major Bantu Holomisa

Like/respect

Not at all                      0 1 2 3 4 5 6 7 8 9 **10**                      Very much

Dislike/disrespect

Not at all                      **0** 1 2 3 4 5 6 7 8 9 10                      Very much

### 1) The South African Government

Like/respect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

Dislike/disrespect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

### 2) Buddha

Like/respect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

Dislike/disrespect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

### 3) The Courts

Like/respect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

Dislike/disrespect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

### 4) Inkatha Freedom Party (IFP)

Like/respect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

Dislike/disrespect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

### 5) The family

Like/respect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

Dislike/disrespect

Not at all                      0 1 2 3 4 5 6 7 8 9 10                      Very much

6) God

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

7) Chris Hani

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

8) The Conservative Party (CP)

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

9) Your Church

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

10) Bishop Desmond Tutu

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

11) Nelson Mandela

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

12) The Pope

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

13) Doctors

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

14) Jesus Christ

Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

## 15) Parents

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

## 16) The Afrikaanse Weerstand Beweging (AWB)

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

## 17) Friends

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

## 18) Personal Conscience

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

## 19) The Army

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

## 20) Your Church Leader

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

## 21) Science

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

## 22) The Democratic Party (DP)

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

## 23) The University

Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much



33) Umkontho we Sizwe		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
34) The Organization of African Unity (OAU)		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
35) The United Nations (UN)		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
36) The Koran		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
37) Your School Principal		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
38) Eugene Terreblanche		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
39) Your Teacher		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
40) Your Professors		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
41) Your Lover		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

42) Your Own Values		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
43) Mangasothu Buthalezi		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
44) The Talmud		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
45) Your Cultural tradition		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much

SECTION 5

Please answer the following questions by indicating your reactions to each statement by placing a cross in the appropriate cell according to the following scale:

VSD if you *very strongly disagree* with the statement.

SD if you *strongly disagree* with the statement.

MD if you *moderately disagree* with the statement.

sD if you *slightly disagree* with the statement.

sA if you *slightly agree* with the statement.

MA if you *moderately agree* with the statement.

SA if you *strongly agree* with the statement.

VSA if you *very strongly agree* with the statement.

If you feel precisely neutral about the statement, place a cross in the cell marked with a "N".

1) It is always better to trust the judgement of the proper authorities in government and religion, than to listen to the noisy rabble rousers in our society who are trying to create doubt in people’s minds.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

2) There is nothing immoral or sick in somebody being a homosexual.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

3) The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

4) "Free speech" means that people should even be allowed to make speeches and write books urging the overthrow of the government.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

5) In these troubled times laws have to be enforced without mercy, especially when dealing with agitators and revolutionaries who are stirring things up.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

6) Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

7) It is best to treat dissenters with leniency and an open mind, since new ideas are the lifeblood of progressive change.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

8) The biggest threat to our freedom comes from the communists and their kind, who are out to destroy religion, ridicule patriotism, corrupt the youth, and in general undermine our whole way of life.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

9) The way things are going in this country, it is going to take a lot of "strong medicine" to straiten out the troublemakers, criminals and perverts.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

10) It is important to protect fully the rights of radicals and deviants.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

11) Rules about being "well-mannered" and respectable are chains from the past which we should question very thoroughly before accepting.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

12) Once the government leaders and the authorities condemn the dangerous elements in our society, it will be the duty of every patriotic citizen to help stamp out the rot that is poisoning our country from within.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

13) The self-righteous "forces of law and order" threaten freedom in our country a lot more than most of the groups they claim are "radical" and "godless".

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

14) Students in high school and at university must be encouraged to challenge their parents' ways, confront established authorities, and in general criticize the customs and traditions of our society.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

## SECTION 6

Please complete the following by placing a cross in the appropriate box.

1) Peace is the only solution to racial hatred in South Africa.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

2) All countries need the wealthy and the poor in order to function effectively.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

3) Only God can solve the South Africa's problems.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

4) Affirmative action is an essential policy to redress the wrongs of apartheid.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

5) Democracy cannot function in Africa.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	



6) Negotiations are the only way to build the new South Africa.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

7) The armed struggle must continue until majority rule is established.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

8) The United Nations must step in and resolve the conflict in this country.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

9) The devil is at the root of all the strife, misery and conflict plaguing the country.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

10) The police and security forces must control the violent elements of society at all costs.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

11) Our leaders are corrupt, power-seeking individuals who are only interested in feathering their own nests.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

12) The radical elements of society are the main cause of chaos in South Africa.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

13) The poor have not been given an equal chance to get ahead.

I believe it and all South Africans must believe it.	
I believe it but other South Africans need not believe it.	
I don't believe it but other South Africans can believe it.	
I don't believe it and other South Africans must not believe it.	

# **Appendix C**

## **Questionnaire 2**

The following is a study of what university students think and feel about a number of important social and personal questions. We have tried to cover many different and opposing points of view; no matter what your answer to the various questions, you can be sure that many people will feel the same as you.

As this questionnaire is the second component of a two-part study, you are requested to provide your name. You are assured of the strictest confidentiality. The questionnaire will be read by the researcher only. This is a scientific investigation independent of all political, religious and other ideological persuasions. You are encouraged to answer all questions openly. Thank you for your cooperation. Please answer all questions.

## SECTION 1

**Please give the following details.**

- 1) Surname \_\_\_\_\_
- 2) First name \_\_\_\_\_

## SECTION 2

It is assumed here that your attitude toward any given authority is a mixture of both likes (respect) and dislikes (disrespect), given different situations. Give two scores for each of the following authorities or authority figures, one indicating the level that you sometimes like (respect) the authority, the other the level of your possible dislike (disrespect).

Please circle the appropriate figures. Give your immediate reaction. The best answer is your personal opinion.

**Example 1:** If on occasions you truly respect the American government and support their decisions, but on other occasions you hold them in contempt. Then you could answer:

## American Government

## Like/respect

Not at all

0 1 2 3 4 5 6 7 8 9 (10)

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

**Example 2:** If you respect Major Bantu Holomisa completely and support him at all times, then you may answer.

**Major Bantu Holomisa**

**Like/respect**

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

① 1 2 3 4 5 6 7 8 9 10

Very much

- ### 1) The South African Government

**Like/respect**

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

Dislike/disrespect

Not at all

0 1 2 3 4 5 6 7 8 9 10

Very much

2) Buddha			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
3) The Courts			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
4) Inkatha Freedom Party (IFP)			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
5) The family			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
6) God			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
7) The Conservative Party (CP)			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
8) Your Church			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
9) Bishop Desmond Tutu			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
10) Nelson Mandela			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much

11) The Pope			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
12) Jesus Christ			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
13) Parents			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
14) The Afrikaanse Weerstand Beweging (AWB)			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
16) The Army			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
17) Your Church Leader			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
18) The Democratic Party (DP)			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
19) Your School			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
20) The South African Communist Party (SACP)			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much

21) Mohammed			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
22) The African National Congress (ANC)			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
23) The Bible			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
24) F. W. de Klerk			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
25) The Law			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
26) The Police			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
27) Umkontho we Sizwe			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
28) The Organization of African Unity (OAU)			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
29) The United Nations (UN)			
Like/respect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much
Dislike/disrespect			
Not at all	0 1 2 3 4 5 6 7 8 9 10		Very much

30) The Koran		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
31) Your School Principal		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
32) Eugene Terreblanche		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
33) Mangasothu Buthalezi		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
34) The Talmud		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
35) Chris Hani		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
36) Doctors		
Like/respect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much
Dislike/disrespect		
Not at all	0 1 2 3 4 5 6 7 8 9 10	Very much



## SECTION 3

Please answer the following questions by indicating your reactions to each statement by placing a cross in the appropriate cell according to the following scale:

**VSD** if you *very strongly disagree* with the statement.

**SD** if you *strongly disagree* with the statement.

**MD** if you *moderately disagree* with the statement.

**sD** if you *slightly disagree* with the statement.

**sA** if you *slightly agree* with the statement.

**MA** if you *moderately agree* with the statement.

**SA** if you *strongly agree* with the statement.

**VSA** if you *very strongly agree* with the statement.

If you feel precisely neutral about the statement, place a cross in the cell marked with a "N".

- 1) Given the same education and opportunities, blacks should be able to perform as well as whites in any field.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 2) It would be unfair if greater expenditure on black education were to be funded by the white taxpayer.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 3) Given favourable conditions it is quite possible that black majority rule could result in a stable, prosperous and democratic South Africa.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 4) Only equality between black and white can in the long run guarantee social peace in this country.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 5) The large scale extension of political rights to blacks will inevitably lead to chaos.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 6) The wealth of this country is almost entirely due to the hard work and leadership of the whites.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 7) Although black living conditions should be improved, it is crucial for the stable development of the country that whites retain political control.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 8) It is important that drastic steps be taken to ensure a far more equitable division of wealth in this country.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 9) If all races were permitted to mix freely they would probably live in peace.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

- 10) It is almost certainly best for all concerned that interracial marriages not be allowed.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

11) An expert who doesn't come up with a definite answer probably doesn't know too much.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

12) I would like to live in a foreign country for a while.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

13) There is really no such thing as a problem that can't be solved.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

14) People who fit their lives to a schedule probably miss most of the joy of living.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

15) A good job is one where what is to be done and how it is to be done are always clear.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

16) Often the most interesting and stimulating people are those who don't mind being different and original.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

17) People who insist on a yes or a no answer just don't know how complicated things are.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

18) In the long run it is possible to get more done by tackling small, simple problems rather than large and complicated ones.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

19) What we are used to is always preferable to what is unfamiliar.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

20) Many of our most important decisions are based upon insufficient information.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

21) A person who leads an even, regular life in which few surprisers or unexpected happenings arise, really has a lot to be grateful for.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

22) I like parties where I know most of the people more than ones where all or most of the people are complete strangers.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

23) Teachers or supervisors who hand out vague assignments give a chance for one to show initiative and originality.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

24) The sooner we all acquire similar values and ideals the better.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

25) A good teacher is one who makes you wonder about your way of looking at things.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

26) It is more fun to tackle a complicated problem than to solve a simple one.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

## SECTION 4

Which of the following do you favour or believe in?  
 Circle "Yes" or "No". If you are absolutely uncertain, circle "?". There are no right or wrong answers.  
 Just give your first reaction. Answer all questions.

1) Evolution theory	Yes	?	No
2) School uniforms	Yes	?	No
3) Striptease shows	Yes	?	No
4) Modern Art	Yes	?	No
5) Military service	Yes	?	No
6) Socialism	Yes	?	No
7) Divine Law	Yes	?	No
8) Moral training	Yes	?	No
9) Suicide	Yes	?	No
10) Chaperones	Yes	?	No
11) Social welfare	Yes	?	No
12) Legalized abortion	Yes	?	No
13) Chastity	Yes	?	No
14) Female judges	Yes	?	No
15) Big Business	Yes	?	No
16) Conventional clothing	Yes	?	No
17) Nudist camps	Yes	?	No
18) Mass Action	Yes	?	No
19) Church authority	Yes	?	No
20) Disarmament	Yes	?	No
21) Censorship	Yes	?	No
22) Strict rules	Yes	?	No
23) Social Equality	Yes	?	No

24) Casual Living	Yes	?	No
25) Divorce	Yes	?	No
26) Religious truth	Yes	?	No
27) Legalizing dagga	Yes	?	No
28) Privatized health care	Yes	?	No
29) One man\woman one vote	Yes	?	No
30) Homosexuality	Yes	?	No
31) Political radicalism	Yes	?	No
32) Strikes	Yes	?	No

## SECTION 5

Below each of the following authorities you will find 20 adjectives. Circle as many as you think describe that authority.

### 1) The South African government

good	pleasant	loyal	unfriendly	impartial
cowardly	worthless	wise	boring	untrustworthy
bad	likeable	rude	prejudiced	uncommitted
moral	unreliable	strong	courageous	supportive

### 2) The African National Congress (ANC)

good	pleasant	loyal	unfriendly	impartial
cowardly	worthless	wise	boring	untrustworthy
bad	likeable	rude	prejudiced	uncommitted
moral	unreliable	strong	courageous	supportive

### 3) The Police

good	pleasant	loyal	unfriendly	impartial
cowardly	worthless	wise	boring	untrustworthy
bad	likeable	rude	prejudiced	uncommitted
moral	unreliable	strong	courageous	supportive

**4) The United Nations**

good	pleasant	loyal	unfriendly	impartial
cowardly	worthless	wise	boring	untrustworthy
bad	likeable	rude	prejudiced	uncommitted
moral	unreliable	strong	courageous	supportive

**5) God**

good	pleasant	loyal	unfriendly	impartial
cowardly	worthless	wise	boring	untrustworthy
bad	likeable	rude	prejudiced	uncommitted
moral	unreliable	strong	courageous	supportive

**6) The Bible**

good	pleasant	loyal	unfriendly	impartial
cowardly	worthless	wise	boring	untrustworthy
bad	likeable	rude	prejudiced	uncommitted
moral	unreliable	strong	courageous	supportive

**7) Parents**

good	pleasant	loyal	unfriendly	impartial
cowardly	worthless	wise	boring	untrustworthy
bad	likeable	rude	prejudiced	uncommitted
moral	unreliable	strong	courageous	supportive

**8) Your church**

good	pleasant	loyal	unfriendly	impartial
cowardly	worthless	wise	boring	untrustworthy
bad	likeable	rude	prejudiced	uncommitted
moral	unreliable	strong	courageous	supportive

THANK YOU

# Appendix D

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## **The development of a measure of conservatism and examination of the structure of sociopolitical attitudes in South Africa**

Since one of the aims of the thesis was to conduct a quantitative investigation of the relationship between ambiguity tolerance and ideological beliefs, it was necessary to construct a measure of radicalism-conservatism which would be a valid and reliable measure among a South African student sample. Although the Wilson-Patterson (1968) scale is commonly used for this purpose it is culture-bound, dated, and in all likelihood, not appropriate for use in contemporary South Africa. This Appendix reports the results of a study which aimed primarily to develop a culture-appropriate measure of radicalism-conservatism along the lines of the Wilson-Patterson scale. In addition, the study aimed to investigate and conduct cross-cultural comparisons of the structure of sociopolitical attitudes so as to explore the validity of personality-based accounts of attitudinal structure.

Social psychological investigations of the structure of sociopolitical attitudes have been characterized by disagreement regarding the number of factors underlying radicalism-conservatism and whether or not these factors are oblique or orthogonal. However, it is generally recognized that attitudes are structured in coherent patterns. Moreover, at least for the Western democracies where research has been undertaken — including Australia, Britain, New Zealand, Norway, the United States of America, and Sweden — it appears as though the underlying structure of these attitudes is more or less universal (Bagley, Wilson, & Boshier, 1970; Eysenck, 1975; Kerlinger, Middendorp, & Amón, 1976; Sidanius, Ekehammar, & Ross, 1979; Stone, Ommundsen, & Williams, 1985). This begs questions of why; what holds the divergent array of sociopolitical attitudes — political and economic conservatism, religiosity, militarism, authoritarianism, racism, etc. — together in such a universal and coherent manner? Generally speaking, personality dynamics have been the implicit or explicit explanation of such structure. This has practical implications for it suggests that radicalism-conservatism should be treated and measured as a unidimensional construct. One aim of this study, therefore, was to examine the structure of sociopolitical attitudes of a South African sample, to compare this structure with that

from other countries, and thereby, explore the validity of a personality-based explanation of the structure of sociopolitical attitudes.

The most simple argument suggests that the diverse array of sociopolitical opinions are held together in a unidimensional manner by personality functioning. Adorno *et al.* (1950), for example, argued that ethnocentrism, political and economic conservatism, and the attitudinal items comprising the F scale were intercorrelated because they all reflected the same underlying ego-defensive personality disposition. Similarly, others have suggested that ideological opinions are structured in a unidimensional manner (Collins & Hayes, 1993; Eckhardt, 1991; Joe, 1984; Tygart, 1984; Wilson, 1970, 1973; Wilson & Schutte, 1973; Yellig & Wearing, 1974), which is said to reflect an underlying need for certainty (Wilson, 1973), or belief in the goodness or badness of humankind (Tomkins, 1963). From this perspective, radicalism-conservatism is seen as an "individualistic mix of differing cognitive, affective and conative tendencies that find expression and become labelled 'liberal and conservative'" (Loye, 1977, p. 155).

On the other hand, an expanding body of evidence has been unable to identify a general factor of radicalism-conservatism (Eysenck, 1954, 1975; Robertson & Cochrane, 1973; Stone & Russ, 1976; Sidanius, 1978a, 1984). By rotating the initial factor structure of responses to conservatism items, this research has shown different dimensions of sociopolitical beliefs to be empirically distinct — forming different primary, and even secondary factors. Yet even here there is little consensus. One group of researchers has consistently found these factors to be correlated, constituting a "fuzzy set" or a diverse, general left/right factor (Stone *et al.*, 1985; Tomkins, 1963, 1965). Sidanius and colleagues have found that their measure of conservatism reduces to five oblique factors — racism, authoritarian aggression (punitiveness), political and economic conservatism, social inequality, and religion (Sidanius, 1978a, 1984; Sidanius & Ekehammar, 1976; Sidanius *et al.*, 1979). Each of these factors is conceptually and empirically distinct, but is also strongly associated with all other factors.

A second group of researchers has found different dimensions of conservatism to be orthogonal (Bagley, Boshier, & Nias, 1974; Bruni & Eysenck, 1976; Eysenck, 1954, 1975; Goertzel, 1987; Heaven & Connors, 1988; Kerlinger, 1984; Kerlinger *et al.*, 1976; Ray, 1985; Stone & Russ, 1976). In contrast to the "unidimensional" thesis, this latter body of research suggests that radicalism-conservatism is not a bipolar construct. On the contrary, they argue that, being multidimensional and orthogonal, different aspects of radicalism-conservatism derive from different, independent mechanisms. Eysenck (1954), for example, advances a theory of political ideology comprised of two orthogonal factors, R and T. The R factor refers to the traditional radicalism-conservatism dimension, while the T factor refers to toughmindedness-

tendermindedness, a dimension which is argued to reflect personality extroversion-introversion. This interpretation of the T factor has been widely criticised (Christie, 1956a; Rokeach & Hanley, 1956), and instead, it has been suggested that the T factor reflects Machiavellianism (Stone & Russ, 1976), psychotism (Eysenck & Eysenck, 1975; Heaven & Connors, 1988), or religious conservatism (DeFronzo, 1972; Eckhardt, 1991; Eckhardt & Newcomb, 1969; Rokeach & Hanley, 1956). Regardless of the meaning of the factors, Eysenck's theorizing raises serious questions regarding the manner in which radicalism-conservatism is to be interpreted. By rejecting a bipolar conception of radicalism-conservatism, it may make no sense to label individuals either radical or conservative since they may be radical on one dimension but conservative on another (Conover & Feldman, 1981; Kerlinger, 1984). Equally, the common practice of measuring conservatism in a unidimensional manner may have no basis.

As one moves along the continuum of theory, from the unidimensional thesis to the multidimensional and orthogonal thesis, the theory of structure becomes more complex. If personality is indeed the structural agent, why do different dimensions form orthogonal factors? Although the literature is not clear in this regard, there appear to be three possible reasons: (a) the different dimensions reflect different dimensions of personality, (b) some dimensions reflect personality functioning while others reflect the normative structure of beliefs, or (c) the factor structures purely reflect the normative structure of beliefs. The lack of clarity regarding which explanation to accept has been compounded by the massive confusion in the literature regarding what the construct, radicalism-conservatism, denotes. As Stone (1983) correctly points out, "only confusion can result from the attempt to discuss, using a single set of terms [i.e., radicalism-conservatism], both ideologies and the personality dispositions that we presume to underlie differences in attraction to the ideologies" (p. 215). As a result, it has been common not to theorize whether ideological structure is determined by personality or ideological dynamics since an isomorphism between the two has been assumed (both theoretically and methodologically). Political attitudes have been seen as an externalization of personality predispositions. Significant correlations between two measures comprised purely of ideological beliefs (e.g., the F-scale and conservatism) have thus typically been employed to validate personality functioning, whereas the two clusters of attitudinal opinions may be associated due to their common basis in normative ideological constellations which an individual may appropriate for reasons not related to personality functioning (e.g., material circumstances, socialization, etc.).

Cross-cultural studies are especially useful in helping to theorize the structure of ideological beliefs. If basic personality dynamics, such as the need for certainty, structure sociopolitical attitudes, then this structure should be similar for different cultures. A need for certainty, for example, will be reflected in conservative attitudes of individuals from all cultures. On the other



hand, if the correlations arise because attitudes are held together in ideological constellations, then the structure of these attitudes may be expected to vary across cultures with different ideological bases. To illustrate, the empirical distinction between religious conservatism and political and economic conservatism may be related to the separation of religious and political authority associated with the development of the nation state (cf. Anderson, 1991), rather than to some basic structure of personality.

The bulk of the empirical work has tended to support personality-based theory. Cross-cultural comparisons have found similar "fuzzy set" attitudinal structures among Australian and Swedish psychology students (Sidanius *et al.*, 1979), and Norwegian and American psychology students (Stone *et al.*, 1985). Thus, despite the fact that Norway and America differ regarding their emphasis on socialist policy and individualism, similar dimensions of ideological beliefs were evident in both samples. There have also been differences between the attitudinal structures of the different samples. While the content of the factors for the Norwegian and American samples was similar, the order of importance and the strength of association between the factors varied across the samples. It therefore appears as though the reference frame upon which persons from different cultures base their political judgments is similar, but the importance of the various dimensions of judgment is culturally specific. The universal nature of the dimensions of sociopolitical beliefs concurs with the predictions of personality-based theory as it suggests a cross-cultural structural agent. However, it appears as though the normative culture determines the salience of the various dimension for political judgement.

Similar cross-cultural stability has been found for the thesis of a general factor of conservatism (Bagley *et al.*, 1970; Feather, 1975; Hogan, 1977; Wilson & Lee, 1974; Wilson & Schutte, 1973), and for the thesis that attitudinal structure is multidimensional and orthogonal (Bruni & Eysenck, 1976; Eysenck, 1975; Kerlinger *et al.*, 1976). The different factor structures uncovered by the different groups of researchers is, however, largely a function of the method of factor analysis employed. Generally speaking, the "unidimensional" thesis is supported by unrotated factor structures, while the "multidimensional" thesis is based on rotated factor structures (cf. Boshier, 1972). However, the cross-cultural stability of findings appears to be an empirical fact.

The present study represents an attempt to replicate the factor structure of sociopolitical attitudes with a South African sample of psychology students. A South African replication may be useful in determining the normative influences on ideological structure since, unlike other Western democracies, South Africa has been characterized by an ideological atmosphere of intolerance, Manichean conceptions of legitimacy (Gagiano, 1990), and a close relationship between religion and state (Foster, 1991). Thus, while the sample is matched with those employed by Stone *et al.*

(1985) and Sidanius *et al.* (1979), the factor structure underlying sociopolitical beliefs may differ due to the influence of the ideological milieu. Such differences would tend to support a normative theory of ideological structure. In contrast, a personality-based theory of ideological structure would be supported if a similar ideological structure was evident for the South African sample.

One of the most serious problems with previous cross-cultural investigations of attitudinal structure has been a lack of concern for common scale content (Sidanius *et al.*, 1979). However, the use of the same attitudinal content in two different societies is also problematic since the meaning of the items may vary across the cultures (e.g., Wilson's (1973) items, 'fox hunting' and 'Beatniks' have little political relevance for South Africans). Consequently, different factor structures may reflect different meaning systems rather than different personality structures within the two cultures. To overcome these two conflicting methodological issues, the approach taken in the present study is to construct a measure of conservatism which incorporates the dimensions of conservatism identified by Sidanius — punitiveness (authoritarian aggression), political and economic conservatism, social inequality, and religion. An attempt is made to replicate Sidanius' factors with items which are valid indicators of the dimensions of conservatism in the South African context. Rather than stating beforehand whether a unidimensional or multidimensional factor structure is to be expected, and then employing the "appropriate" analytic procedures, the present approach aims first to identify and measure different components of conservatism, and then to assess the degree of association between the different dimensions. Thus, rather than being methodologically driven, the conclusions here are based on observed associations between the different dimensions, which may range from being orthogonal, to forming a strongly intercorrelated unidimensional matrix.

A further aim of the present study was to examine differences in attitudinal structure between groups in different positions on the social status hierarchy. This issue has received little attention. One of the few studies examining class differences in attitudinal structure found no difference in the attitudinal structure of working class and middle class Londoners (Eysenck, 1975). This finding is rather surprising, given that items which tap a need for certainty have different implications for groups at different positions on the status hierarchy. Racist sentiments in South Africa may denote a need for certainty and resistance to change, but these sentiments will have different implications for individuals depending on whether they are Black or White. If the need for certainty is a basic personality dimension which underlies the structure of ideological attitudes, then this should be reflected in similar attitudinal structures of groups with different social status. Black individuals who are conservative in political domains, while obviously less racist than their White counterparts, should be more racist than non-conservative Blacks whose responses do not reflect a need for certainty. On the other hand, findings quite different from

Eysenck's are expected if attitudinal structure is normatively determined. While racist beliefs may be part of a wider constellation of conservative ideology for Whites, they may constitute a separate, independent ideological domain for Blacks.

## **Method**

### **Sample and procedure**

The sample and procedure was precisely the same as that reported in Study 1 (see p. 115).

### **Measures**

#### **Conservatism**

The conservatism scale was developed according to the model provided by Wilson and Patterson (1968; Wilson, 1973). The scale included a range of attitudinal referents framed in terms of "catch-phrases" which respondents evaluated by indicating whether they believed in them (Yes), were uncertain (?), or did not believe in them (No). Items were selected so as to reflect the dimensions of conservatism identified by Sidanius and colleagues. Both liberal and conservative items were included to control for response acquiescence.

An initial pool of 50 items was examined in a pilot study ( $N = 101$ ). By means of item analysis and a preliminary factor analysis, a final 32-item scale was developed which had an alpha coefficient of .85 and was comprised of four factors resembling those underlying Sidanius' conservatism scale (see Appendix C, Section 4).

#### **Authoritarianism**

Duckitt's (1990) 14-item Right-Wing Authoritarianism scale (RWA) was used as a measure of authoritarianism (see Appendix B, Section 5). This scale is an improved measure of authoritarianism as it is balanced against response acquiescence, unidimensional, and has been constructed according to Altemeyer's (1981, 1988) empirically verified definition of authoritarianism. The RWA scale has been shown to be a reliable and valid measure of authoritarianism among White South Africans (Duckitt, 1990).

#### **Racial Prejudice**

The Subtle Racism scale (Duckitt, 1990, 1991b) was employed to assess racial prejudice (see

Appendix C, Section 3, items 1-10). Duckitt has reported adequate reliability and validity statistics for the scale, and the scale is suitable for use with students as it is worded so as "not to be regarded as offensive or socially undesirable by liberal and sophisticated subjects" (Duckitt, 1990, p. 218).

### **Self-ranked liberalism-conservatism**

Subjects were provided with a 7-point ladder, and were asked to indicate how they evaluate their political opinions, on a scale ranging from very liberal [1], through moderate [4], to very conservative [7] (see Appendix B, Section 2, item 4).

### **Political Party Support**

Subjects selected the political party they would "most likely support" from the following: National Party, African National Congress, Afrikaanse Weerstand Beweging, Inkatha Freedom Party, South African Communist Party, Democratic Party, Azanian Peoples Organization, Conservative Party, Pan African Congress (see Appendix B, Section 2).

## **Results**

### **Factor analysis**

Five of the items which tapped the dimension of inequality were dropped from the conservatism scale due to non-significant item-total correlations; their distributions were very highly skewed and evidenced an attenuated range, with nearly all scores being completely liberal. This finding was attributed to the powerful norms toward social equality in liberal institutions during this transitional period of South African history. 'Apartheid' was rejected by all respondents, while 'the new South Africa' was almost unanimously accepted.

The conservatism scale item intercorrelations for the total sample were factor analyzed using the principal factor method, with  $R^2$ 's in the diagonals as communality estimates (Harman, 1976). By means of the scree test (Cattell, 1966), four factors were extracted which explained 16.7%, 6.7%, 4.7%, and 3.8% of the shared variance respectively. While it appears as though a general factor of conservatism may underlie the responses, this conclusion was postponed in order to ascertain whether important differences existed between the underlying dimensions. The factor structure was then rotated, using the Harris-Kaiser "orthoblique" transformation. This method is appropriate for exploratory factor analysis as it obviates the necessity to hypothesize whether factors are orthogonal or oblique (Kaiser, 1970). The pattern of factor weights allowed a

relatively unambiguous interpretation of factors, which were named: 1) inequality, 2) religious conservatism, 3) political and economic conservatism, and 4) punitiveness (see Table D.1).

**Table D.1:** Factor structure of the Conservatism scale ( $N = 240$ ).

Items	Factors				Communality
	Inequality	Religious	PEC	Punitiveness	
Social equality	.65				.43
Social welfare	.44				.21
Nudist camps		.71		.39	.52
Legalized abortion		.65			.43
Homosexuality		.64		.30	.44
Striptease shows		.62			.41
Divorce		.60			.39
Legalizing dagga		.60		.40	.39
Religious truth		.54		.32	.35
Divine Law		.50		.43	.30
Church authority		.49		.49	.34
Chastity		.45		.39	.25
Casual living		.39			.23
Suicide		.36			.21
Strict rules				.62	.39
Censorship		.35		.60	.39
Moral training		.34		.42	.23
School uniforms				.41	.21
Military service			.37	.41	.27
Conventional clothing				.38	.15
Chaperones				.37	.20
Mass action			.69		.48
Strikes			.65		.43
Political radicalism			.44		.24
Socialism			.42		.20
Big business			.35		.19
Privatized health care			.34		.22
$\Sigma(\text{loadings})^2$	1.09	4.19	2.00	2.92	

**Note.** Only weights greater than .30 are reported.

The factor analysis yielded two findings with regard to the aim of replicating the dimensions of conservatism identified by Sidanius. Firstly, the factor structure of conservatism among this South

African sample was very similar to that of other Western student samples (cf. Sidanius, 1984; Sidanius *et al.*, 1979; Stone *et al.*, 1985). The four dimensions underlying conservatism formed empirically distinct, readily interpretable factors, rather than a single general factor. Secondly, unlike with other samples, the 'inequality' factor proved to be unstable. Five items concerning social inequality which had significant item-total correlations in the pilot study had to be dropped due to low item-total correlations and low factor loadings in the final study. The remaining two items were also highly skewed and constituted an unreliable measure of 'inequality' ( $\alpha = .56$ ). This factor was consequently dropped from further analysis. Thus, although similar dimensions of conservatism were evident in South Africa as in other Western countries, it was not possible to identify a distinct, coherent dimension reflecting 'inequality'.

### Correlational analysis

The unweighted sum of the items which loaded on each dimension of conservatism — political & economic conservatism ( $\alpha = .65$ ), punitiveness ( $\alpha = .66$ ), and religious conservatism ( $\alpha = .84$ ) — were computed and employed as three indices of conservatism. If an item loaded on two factors, it was included only in the factor on which it loaded highest. The RWA scale ( $\alpha = .75$ ) and the Subtle Racism ( $\alpha = .79$ ) scale were employed as two further indices of ideological conservatism. Descriptive statistics for all indices of conservatism are reported in Table D.2. A comparison of the means with the potential range of each scale indicated that, as expected from psychology students at UCT, the sample was liberal. While all three samples rated themselves equally conservative, the Black and Coloured samples were more religiously conservative but less racist and politically conservative than the White sample. It appeared as though different criteria were employed in self-rating.

**Table D.2:** Univariate statistics for indices of ideological conservatism

Conservatism	Group Differences <sup>a</sup>	Population group								
		White			Black			Coloured		
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
C1-Religious	$R^2 = .07$	11.95 a	5.61	151	14.26 b	4.47	42	15.66 b	5.89	47
C2-PEC	$R^2 = .24$	8.30 b	2.63	151	4.59 a	2.73	42	5.85 a	2.84	47
C3-Punitive		7.36	3.44	151	8.02	3.53	42	7.87	3.75	47
RWA		52.82	16.35	151	51.31	14.22	44	53.21	16.28	47
SR	$R^2 = .18$	29.26 b	12.69	151	15.86 a	8.59	44	21.28 a	10.92	46
Self-Rank		3.04	1.13	149	3.05	1.16	41	3.24	1.60	45

**Note.** Significant multiple comparisons [Newman-Keuls] arranged from the smallest mean (a) to largest (b) ( $\alpha = .05$ ).

<sup>a</sup>Effect sizes are reported for significant group mean differences ( $\alpha = .05$ ).

Correlation matrices were generated for the five measures of conservatism separately for the White, Black, and Coloured samples (see Table D.3). Both important similarities and differences were evident in the correlation matrices of the South African sample and other Western samples.

Table D.3: Correlations between indices of sociopolitical beliefs for Whites, Blacks, and Coloureds.

White sample					
Conservatism	C2	C3	RWA	SR	Self-rank
C1 - Religious	.20*	.45***	.34***	.09	.13
C2 - PEC		.36***	.49***	.47***	.25**
C3 - Punitiveness			.48***	.32***	.33***
RWA				.48***	.39***
Subtle racism					.45***
Black sample					
Conservatism	C2	C3	RWA	SR	Self-rank
C1 - Religious	.25	.49***	.15	-.21	-.19
C2 - PEC		.15	.17	.26	.38*
C3 - Punitiveness			.11	-.13	-.23
RWA				.10	-.09
Subtle racism					.28
Coloured sample					
Conservatism	C2	C3	RWA	SR	Self-rank
C1 - Religious	.28	.46**	.45**	.08	.41*
C2 - PEC		.32*	.57***	.39*	.00
C3 - Punitiveness			.52***	.11	-.08
RWA				.20	.13
Subtle racism					.09

\*p < .01. \*\*p < .001. \*\*\*p < .0001. for the White sample.  
\*p < .05. \*\*p < .005. \*\*\*p < .0001. for the Black and Coloured samples.

Firstly, while the weak association between religious conservatism and political and economic conservatism was significant for the White sample, it did not reach significance for the Black and Coloured samples. Also, for all three samples, religious conservatism was not associated with racism. These finding concur with Eysenck’s (1954, 1975) distinction between tough-tendermindedness (religious conservatism) and radicalism-conservatism. However, the lack of association between indices of conservatism pertaining to political and religious domains does not imply that these are two independent domains of sociopolitical ideology. On the contrary, both political and economic conservatism and religious conservatism were related to authoritarianism

and punitiveness. For the White and Coloured samples, the different dimensions of conservatism, rather than being either unidimensional or multidimensional and orthogonal, appear to constitute a "fuzzy set" or a diverse, general left/right factor.

This conclusion was confirmed by a secondary principal factor factor analysis for the White sample (see Table D.4). Two highly correlated factors were derived, explaining 69% of shared variance. After orthoblique rotation it was found that religious conservatism loaded only on the first factor, while racism and self-ranked conservatism loaded only on the second factor. Political and economic conservatism loaded most strongly on the racism factor, while the other dimensions loaded equally strongly on both factors.

**Table D.4:** Secondary factor structure of sociopolitical beliefs ( $N = 151$ ).

Index	Factors		Communality
	Religious	Racism	
C-Total	.97	.61	.98
C1-Rel	.89		.85
C2-PEC	.45	.71	.52
C3-Pun	.77	.55	.64
RWA	.57	.75	.62
SR		.83	.72
Self-Rank		.70	.50
$\Sigma(\text{loadings})^2$	2.98	2.96	

Note. Only weights greater than .30 are reported.

Secondly, significant differences were evident in the correlation matrices of the three samples. In contrast to the matrix of significant correlations for the White and Coloured samples, the correlation matrix for the Black sample included only two significant associations. For the White and Coloured samples, political and economic conservatism was associated with punitiveness, authoritarianism, and racism. These associations could reflect personality functioning since they suggest that individuals who manifested a need for certainty in one dimension also manifested that need in other dimensions. However, for the Black sample, political and economic conservatism was not associated with any other dimension of conservatism. Obviously, the type of conservatism assessed by these measures is associated with White domination and they do not have similar meaning for Black and White students. However, the lack of association between the different dimensions suggest that these were not accepted or rejected *en masse*. There are two



possible explanations for these findings. Either conservatism is not related to personality, and the intercorrelations for the White and Coloured samples occur due to the common cultural origins of the different dimensions (Hartmann, 1977; Kagitcibasi, 1970), or the items constituting the measures do not tap a conservative personality dimension (e.g., need for certainty) among Blacks. The second possibility is, however, unlikely because racism, authoritarianism, and political conservatism have all sustained minority rule in South Africa (Foster, 1991), and thus all reflect a conservative 'resistance to change'. Conservative personalities who resist change in one dimension should also resist change in others.

Thirdly, the association between self-ranked liberalism-conservatism and the "objective measures" of conservatism suggests that conservatism means different things to the three samples. The Black sample rated themselves conservative according to their political and economic conservatism, while the Coloured sample's self-rankings were associated only with religious conservatism. The White sample's self-ranked conservatism was most strongly associated with Subtle Racism. These findings may throw some light on the differences between the correlation matrices of the three samples. Because the meaning of conservatism is culturally determined, the structure of conservative attitudes may also reflect the structure of cultural meaning systems (ideology) rather than individual personality. For example, while Blacks reject the racism which has sustained White domination in South Africa, they may be divided over whether they accept capitalist or socialist economic policy. In contrast, "White ideology" has integrated racism, authoritarianism, and conservative political and economic policy into an interrelated and coherent whole.

Finally, the results provide confirmation of the concurrent validity of the Conservatism scale. As required, conservatism scores were strongly associated with other conservative beliefs — including racism, authoritarianism, and self-ranked liberalism-conservatism — among the White sample. In addition, conservatism was related to the political party which subjects supported. The political parties were ranked from liberal to conservative on a five-point scale.<sup>1</sup> Separate MANOVA's (GLM) were undertaken for each population group to ascertain whether total conservatism, religious conservatism, political and economic conservatism, or punitiveness were related to political party support. Political and economic conservatism was linearly related to political party support for the Black sample ( $F(3, 33) = 4.92, p < .006, R^2 = .31$ ), the Coloured sample ( $F(4,35) = 5.53, p < .002, R^2 = .39$ ), and the White sample ( $F(4,139) = 12.70, p < .0001, R^2 = .27$ ). No other dimensions of conservatism were related to political

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<sup>1</sup> Sixteen academics from the departments of sociology, political studies, and psychology were asked to rank the political parties from liberal to conservative. The mean ranking of each party was employed as an index of that party's liberalism-conservatism. Political support was thus ranked from 1 (liberal) to 7 (conservative). Little discrimination was evident between the mean ranks of the 3 most liberal parties and their scores were collapsed into one category.

support for the Black and Coloured samples. The White sample's political support was also related to total conservatism ( $F(4,139) = 11.88, p < .0001, R^2 = .25$ ), religious conservatism ( $F(4,139) = 3.80, p < .006, R^2 = .10$ ), and punitiveness ( $F(4,139) = 8.83, p < .0001, R^2 = .20$ ).

## Discussion

This study aimed to (a) develop a measure of radicalism-conservatism which would be appropriate for use among South African students, and (b) replicate the factor structure of sociopolitical attitudes among a South African sample of students. The first aim was relatively unproblematic: the scale developed here was shown to a valid and reliable measure of ideological conservatism for this sample. The second aim, however, is less clear cut. It is possible, with the data at hand, to find support for three different theories of ideological structure. The strong unrotated factor could support the 'unidimensional' thesis, while support for the 'multidimensional and orthogonal' thesis could be derived from the lack of association between religious conservatism and political and economic conservatism and racism. Both of these options were, however, rejected in favour of the 'fuzzy set' thesis since it appears to provide the best account of the overall pattern of results. On its own, the 'unidimensional' thesis ignores important differences between the underlying dimensions of conservatism. A general factor of conservatism cannot account for the findings that the different subsample's self-ranked conservatism was related only to specific dimensions of conservatism. On the other hand, the 'multidimensional and orthogonal' thesis ignores the commonalities that both religious conservatism and political and economic conservatism have with authoritarianism. In addition, the degree of association between the different dimensions of conservatism appears to vary across population group, suggesting that the structure of sociopolitical attitudes may vary from the extreme of unidimensionality to another extreme of orthogonal factors. Overall, the results suggest that it is advisable to investigate the correlates of each factor of conservatism in addition to the summed scale.

The present findings indicate a degree of cross-cultural stability in the structure of sociopolitical attitudes. Other cross-cultural studies which have employed a similar methodology have found comparable dimensions of conservatism, and have found these dimensions to cohere in the form of a 'fuzzy set' (Sidanius *et al.*, 1979; Stone *et al.*, 1985). The important feature of this work is that, unlike studies which have supported the unidimensional thesis and the multidimensional and orthogonal thesis, the factor analytic methods employed allow a fair test of the different possible structures. The factors were rotated in a manner which does not ensure orthogonality, and then the unweighted factors were correlated to assess whether the degree of intercorrelation

between the factors reflects an orthogonal or a unidimensional structure.

In addition to the cross-cultural stability of the structure of ideological attitudes, important differences were found between the present results and previous findings. In spite of attempts to replicate Sidanius' dimensions of conservatism, it was not possible to develop a reliable measure of 'inequality'. This failure does not mean that such a dimension of sociopolitical ideology does not exist in the country; on the contrary, the rejection of social inequality is an extremely salient feature of the shift from the old to the new South Africa. However, within the liberal institution where the study was undertaken, few of these students were prepared to endorse, even in the slightest, responses which reflected an acceptance of inequality. Thus, it appears as though situational influences may have prevented the emergence of a separate, reliable dimension of 'inequality'.

Other aspects of the present findings also question whether personality dynamics are sufficient to account for the structure of ideological attitudes. Substantial differences were found in the correlation matrices of the Black, White, and Coloured samples. In contrast to the matrix of significant correlations for the White and Coloured samples, the matrix for the Black sample reflected an attitudinal structure of orthogonal dimensions. If ideological beliefs are structured by a basic personality dimension such as the need for certainty, why is it not reflected in different samples? While it is possible that the measures employed do not tap the personality dimension in the different samples, this possibility is unlikely since they are all associated with White minority rule, the endorsement of which indicates resistance to change and a need for certainty. However, the dimensions do have different meaning for the different samples as change has different implications for Whites than it does for Blacks. It would thus appear as though culturally mediated systems of meaning are important determinants of ideological structure. This conclusion received further support from finding that self-ranked conservatism was associated with different "objective measures" of conservatism for the different samples.

While the findings have been suggestive, they cannot disprove the validity of a personality-based theory of ideological structure. The marked degree of cross-cultural stability in the dimensions of ideological conservatism uncovered here and in other work suggests that personality may function as a cross-cultural structural agent. However, these consistencies may also reflect similar ideological systems (i.e., modern, capitalist, nationalist) which characterize Western democracies. It may be precisely the alienation from the state which underlies the different ideological structure of the Black sample.

With the exception of Kerlinger's (1984) work, the few examples of theory building in this area

have relied on personality theory (Adorno *et al.*, 1950; Eysenck, 1954; Tomkins, 1963; Wilson, 1973). In contrast, the present study suggests that cultural differences, situational influences, and group status may impact on the structure of sociopolitical attitudes. It would seem that exploratory work needs to be undertaken to isolate different levels of determinants of ideological structure along the lines suggested by Doise (1986). Nonetheless, the findings do indicate that, for practical purposes at least, conservatism should not be treated as a unidimensional construct, and the correlates of different dimensions need to be studied independently.

# **Appendix E**

## **Questionnaire 3**

This brief research questionnaire is intended to test a research design. Please fill out each page separately without reference to your answers on the preceding page. You will remain completely anonymous and are encouraged to answer all questions openly. Thank you for your cooperation. Please answer all questions.

# SECTION 1

Please give the following details (underline the appropriate response)

- 1) SEX :            Male            Female
- 2) POPULATION GROUP : Black   White   Coloured   Indian   Jewish   foreign
- 3) HOME LANGUAGE : Xhosa   English   Afrikaans
- Other (please specify) \_\_\_\_\_
- 4) AGE :                \_\_\_\_\_ years.

# SECTION 2

Please answer the following questions by indicating your reactions to each statement by placing a cross in the appropriate cell according to the following scale:

VSD if you *very strongly disagree* with the statement.  
SD if you *strongly disagree* with the statement.  
MD if you *moderately disagree* with the statement.  
sD if you *slightly disagree* with the statement.  
sA if you *slightly agree* with the statement.  
MA if you *moderately agree* with the statement.  
SA if you *strongly agree* with the statement.  
VSA if you *very strongly agree* with the statement.

If you feel precisely neutral about the statement, place a cross in the cell marked with a "N".

1) It is always better to trust the judgement of the proper authorities in government and religion, than to listen to the noisy rabble rousers in our society who are trying to create doubt in people's minds.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

2) There is nothing immoral or sick in somebody being a homosexual.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

3) The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

4) "Free speech" means that people should even be allowed to make speeches and write books urging the overthrow of the government.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

5) In these troubled times laws have to be enforced without mercy, especially when dealing with agitators and revolutionaries who are stirring things up.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

6) Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

7) It is best to treat dissenters with leniency and an open mind, since new ideas are the lifeblood of progressive change.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
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8) The biggest threat to our freedom comes from the communists and their kind, who are out to destroy religion, ridicule patriotism, corrupt the youth, and in general undermine our whole way of life.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

9) The way things are going in this country, it is going to take a lot of "strong medicine" to straiten out the troublemakers, criminals and perverts.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

10) It is important to protect fully the rights of radicals and deviants.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

11) Rules about being "well-mannered" and respectable are chains from the past which we should question very thoroughly before accepting.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

12) Once the government leaders and the authorities condemn the dangerous elements in our society, it will be the duty of every patriotic citizen to help stamp out the rot that is poisoning our country from within.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

13) The self-righteous "forces of law and order" threaten freedom in our country a lot more than most of the groups they claim are "radical" and "godless".

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

14) Students in high school and at university must be encouraged to challenge their parents' ways, confront established authorities, and in general criticize the customs and traditions of our society.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

15) Given the same education and opportunities, blacks should be able to perform as well as whites in any field.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

16) It would be unfair if greater expenditure on black education were to be funded by the white taxpayer.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

17) Given favourable conditions it is quite possible that black majority rule could result in a stable, prosperous and democratic South Africa.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

18) Only equality between black and white can in the long run guarantee social peace in this country.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

19) The large scale extension of political rights to blacks will inevitably lead to chaos.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

20) The wealth of this country is almost entirely due to the hard work and leadership of the whites.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

21) Although black living conditions should be improved, it is crucial for the stable development of the country that whites retain political control.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

22) It is important that drastic steps be taken to ensure a far more equitable division of wealth in this country.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

23) If all races were permitted to mix freely they would probably live in peace.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

24) It is almost certainly best for all concerned that interracial marriages not be allowed.

VSD	SD	MD	sD	N	sA	MA	SA	VSA
-----	----	----	----	---	----	----	----	-----

## SECTION 3

Please underline the word which expresses or most closely expresses the way you feel toward the members of other groups, nationalities, or races (as a group and not the best members you have known, or the worst) with regard to certain relationships stated below.

**Example:** According to my first feeling reaction, I would willingly admit:

Any : Most : Some : Few : No ... Americans to live and work in my country.

1) According to my first feeling reaction, I would willingly admit

- Any : Most : Some : Few : No...Jews to enter my country.
- Any : Most : Some : Few : No...Jews to live and work in my country.
- Any : Most : Some : Few : No...Jews to full citizenship, including the right to vote, in my country.
- Any : Most : Some : Few : No...Jews to my school or university, to my profession or occupation.
- Any : Most : Some : Few : No...Jews to my street as neighbours.
- Any : Most : Some : Few : No...Jews to my home as my personal friends.
- Any : Most : Some : Few : No...Jews to close kinship by marriage.



- 2) According to my first feeling reaction, I would willingly admit
- Any : Most : Some : Few : No...Afrikaners to enter my country.
  - Any : Most : Some : Few : No...Afrikaners to live and work in my country.
  - Any : Most : Some : Few : No...Afrikaners to full citizenship, including the right to vote, in my country.
  - Any : Most : Some : Few : No...Afrikaners to my school or university, to my profession or occupation.
  - Any : Most : Some : Few : No...Afrikaners to my street as neighbours.
  - Any : Most : Some : Few : No...Afrikaners to my home as my personal friends.
  - Any : Most : Some : Few : No...Afrikaners to close kinship by marriage.
- 3) According to my first feeling reaction, I would willingly admit
- Any : Most : Some : Few : No...Blacks to enter my country.
  - Any : Most : Some : Few : No...Blacks to live and work in my country.
  - Any : Most : Some : Few : No...Blacks to full citizenship, including the right to vote, in my country.
  - Any : Most : Some : Few : No...Blacks to my school or university, to my profession or occupation.
  - Any : Most : Some : Few : No...Blacks to my street as neighbours.
  - Any : Most : Some : Few : No...Blacks to my home as my personal friends.
  - Any : Most : Some : Few : No...Blacks to close kinship by marriage.
- 4) According to my first feeling reaction, I would willingly admit
- Any : Most : Some : Few : No...English-speakers to enter my country.
  - Any : Most : Some : Few : No...English-speakers to live and work in my country.
  - Any : Most : Some : Few : No...English-speakers to full citizenship, including the right to vote, in my country.
  - Any : Most : Some : Few : No...English-speakers to my school or university, to my profession or occupation.
  - Any : Most : Some : Few : No...English-speakers to my street as neighbours.
  - Any : Most : Some : Few : No...English-speakers to my home as my personal friends.
  - Any : Most : Some : Few : No...English-speakers to close kinship by marriage.
- 5) According to my first feeling reaction, I would willingly admit
- Any : Most : Some : Few : No...Indians to enter my country.
  - Any : Most : Some : Few : No...Indians to live and work in my country.
  - Any : Most : Some : Few : No...Indians to full citizenship, including the right to vote, in my country.
  - Any : Most : Some : Few : No...Indians to my school or university, to my profession or occupation.
  - Any : Most : Some : Few : No...Indians to my street as neighbours.
  - Any : Most : Some : Few : No...Indians to my home as my personal friends.
  - Any : Most : Some : Few : No...Indians to close kinship by marriage.
- 6) According to my first feeling reaction, I would willingly admit
- Any : Most : Some : Few : No...Coloureds to enter my country.
  - Any : Most : Some : Few : No...Coloureds to live and work in my country.
  - Any : Most : Some : Few : No...Coloureds to full citizenship, including the right to vote, in my country.
  - Any : Most : Some : Few : No...Coloureds to my school or university, to my profession or occupation.
  - Any : Most : Some : Few : No...Coloureds to my street as neighbours.
  - Any : Most : Some : Few : No...Coloureds to my home as my personal friends.
  - Any : Most : Some : Few : No...Coloureds to close kinship by marriage.

- 7) According to my first feeling reaction, I would willingly admit
- Any : Most : Some : Few : No...Russians to enter my country.
  - Any : Most : Some : Few : No...Russians to live and work in my country.
  - Any : Most : Some : Few : No...Russians to full citizenship, including the right to vote, in my country.
  - Any : Most : Some : Few : No...Russians to my school or university, to my profession or occupation.
  - Any : Most : Some : Few : No...Russians to my street as neighbours.
  - Any : Most : Some : Few : No...Russians to my home as my personal friends.
  - Any : Most : Some : Few : No...Russians to close kinship by marriage.

## SECTION 4

Please complete the following items by indicating how frequently you experience the feelings associated with each statement. Please circle the appropriate figures.

- I want to express my emotions honestly but I am afraid that it may cause me embarrassment or hurt.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- I try to control my jealousy concerning my girlfriend/boyfriend even though I want to let them know I'm hurting.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- I make an effort to control my temper at all times even though I'd like to act on these feelings at times.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- I try to avoid sulking even when I feel like it.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- When I am really proud of something I accomplish I want to tell someone but I fear I will be thought of as conceited.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- I would like to express my affection more physically but I am afraid others will get the wrong impression.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- I try not to worry others even though sometimes they should know the truth.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- Often I'd like to show others how I feel, but something seems to be holding me back.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- I strive to keep a smile on my face in order to convince others I am happier than I really am.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- I try to keep my deepest fears and feelings hidden, but at times I'd like to open up to others.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- I'd like to talk about my problems with others, but at times I just can't.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way

- 12) When someone bothers me, I try to appear indifferent even though I'd like to tell them how I feel.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 13) I try to refrain from getting angry with my parents even though I want to at times.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 14) I try to show people I love them, although at times I am afraid that it may make me appear weak or too sensitive.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 15) I try to apologize when I have done something wrong but I worry that I will be perceived as incompetent.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 16) I think about acting when I am angry but I try not to.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 17) Often I find that I am not able to tell others how much they really mean to me.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 18) I want to tell someone when I love them, but it is difficult to find the right words.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 19) I would like to express my disappointment when things don't go as well as planned, but I don't want to appear vulnerable.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 20) I can recall a time when I wish that I had told someone how much I really cared about them.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 21) I try to hide my negative feelings around others, even though I am not being fair to those close to me.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 22) I would like to be more spontaneous in my emotional reactions but I just can't seem to do it.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 23) I try to suppress my anger but I would like other people to know how I feel.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 24) It is hard to find the right words to indicate to others what I am really feeling.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 25) I worry that if I express negative emotions such as fear and anger, other people will not approve of me.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 26) I feel guilty after I have expressed anger to someone.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 27) I often cannot bring myself to express what I am really feeling.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way
- 28) After I express anger at someone, it bothers me for a long time.  
 Never Feel that way      1 2 3 4 5      Frequently Feel that way

## SECTION 5

Given that your opinion toward any social issue is a mixture of both agreement and disagreement, depending on the situation that you are in; provide 2 scores for each of the following statements. The first score indicates the highest level that you sometimes feel you agree with the statement. The second score indicates the highest level that you sometimes feel you disagree with the statement.

### Example 1.

If you always believe strongly that your parents are supportive, and never feel that they are critical of you, you could answer.

My parents are supportive

Agree

not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

### Example 2.

If you sometimes believe firmly that your parents are supportive, but on other occasions you find your parents highly critical, you could answer.

My parents are supportive

Agree

not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

1) It is always better to trust the judgement of the proper authorities in government and religion, than to listen to the noisy rabble rousers in our society who are trying to create doubt in people's minds.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

2) There is nothing immoral or sick in somebody being a homosexual.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

3) The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

4) "Free speech" means that people should even be allowed to make speeches and write books urging the overthrow of the government.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

5) In these troubled times laws have to be enforced without mercy, especially when dealing with agitators and revolutionaries who are stirring things up.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

6) Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

7) It is best to treat dissenters with leniency and an open mind, since new ideas are the lifeblood of progressive change.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

8) The biggest threat to our freedom comes from the communists and their kind, who are out to destroy religion, ridicule patriotism, corrupt the youth, and in general undermine our whole way of life.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

9) The way things are going in this country, it is going to take a lot of "strong medicine" to straiten out the troublemakers, criminals and perverts.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

10) It is important to protect fully the rights of radicals and deviants.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

11) Rules about being "well-mannered" and respectable are chains from the past which we should question very thoroughly before accepting.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

12) Once the government leaders and the authorities condemn the dangerous elements in our society it will be the duty of every patriotic citizen to help stamp out the rot that is poisoning our country from within.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

13) The self-righteous "forces of law and order" threaten freedom in our country a lot more than most of the groups they claim are "radical" and "godless".

Agree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Agree very much

Disagree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Disagree very much

14) Students in high school and at university must be encouraged to challenge their parents' ways, confront established authorities, and in general criticize the customs and traditions of our society.

Agree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Agree very much

Disagree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Disagree very much

15) Given the same education and opportunities, blacks should be able to perform as well as whites in any field.

Agree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Agree very much

Disagree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Disagree very much

16) It would be unfair if greater expenditure on black education were to be funded by the white taxpayer.

Agree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Agree very much

Disagree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Disagree very much

17) Given favourable conditions it is quite possible that black majority rule could result in a stable, prosperous and democratic South Africa.

Agree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Agree very much

Disagree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Disagree very much

18) Only equality between black and white can in the long run guarantee social peace in this country.

Agree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Agree very much

Disagree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Disagree very much

19) The large scale extension of political rights to blacks will inevitably lead to chaos.

Agree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Agree very much

Disagree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Disagree very much

20) The wealth of this country is almost entirely due to the hard work and leadership of the whites.

Agree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Agree very much

Disagree

Not at all 0 1 2 3 4 5 6 7 8 9 10 Disagree very much

21) Although black living conditions should be improved, it is crucial for the stable development of the country that whites retain political control.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

22) It is important that drastic steps be taken to ensure a far more equitable division of wealth in this country.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

23) If all races were permitted to mix freely they would probably live in peace.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

24) It is almost certainly best for all concerned that interracial marriages not be allowed.

Agree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Agree very much

Disagree

Not at all    0 1 2 3 4 5 6 7 8 9 10    Disagree very much

# Appendix F

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## Transcription of an interview with Koos Vermeulen<sup>1</sup>

SABC TV1 Agenda 25 April 1993

001 *Leslie.* Good evening and welcome to you Mr. Vermeulen.

002 *Vermeulen.* Thank you Leslie.

003 *Leslie.* Um Mr. Vermeulen, the organization World Apartheid Movement has (2.1) sprung  
004 into prominence since the killing of Chris Hani, the secretary general of the SACP. Can you  
005 tell us a little about what you stand for, what WAM is all about.

006 *Vermeulen.* Right, the World Apartheid Movement .originated when we discovered that there  
007 is a necessity (.) to (.) take the ideology of apartheid world wide. Now we first established  
008 branches worldwide and then after er the release of Mandela we started to get a movement  
009 organized in South Africa. Now although we use the name apartheid, I must say that our  
010 movement differs a little bit from the original apartheid system of the Nationalist Party  
011 because they abused the apartheid system by introducing and enforcing laws that had nothing  
012 to do with the apartheid system.

013 *Leslie.* Um what how do you::people understand apartheid.

014 *Vermeulen.* Right, we understand apartheid, the apartheid system as it is now, as a system  
015 where every group that possess their own race, culture, historical background, as well their  
016 as their historical lands.

017 *Leslie.* Are you er er [ a religious pers political party?

018 *Vermeulen.* [ ye um:

019 that's correct yes. We're not a party. We're not. We're a  
020 movement. We're a movement.

---

<sup>1</sup> The transcription notation is based on that described in the Appendix to Potter and Wetherell (1987).



021 *Leslie.* You said er um that since the release of Mandela you decided to establish this World  
022 Apartheid Movement. What was the significance of Mandela's release that brought you into  
023 prominence or into this=

024 *Vermeulen.* = well well we realized that we've got a global problem and to solve this  
025 country's problems we need to address the world and that's why we first established branches  
026 worldwide, including the Eastern block countries.

027 *Leslie.* So in the Eastern bloc you having people who would want apartheid not to be  
028 removed, who share that kind of view with you.

029 *Vermeulen.* Yes er including Russia, we also got branches in Russia. er at the moment we  
030 handle eleven languages, amongst other Polish and Russian in the East bloc countries, as well  
031 as German, and er the movement is growing rapidly, but we're on the brink of a small  
032 change.

033 *Leslie.* Ok. You were quoted as saying (2.5) you were going to be supporting the alleged  
034 assassin Mr Waluz. Why would you be involved in an act like that?

035 *Vermeulen.* Right, first of all we (1.8) do the same only what the ANC did. Whether they  
036 differ from someone's objectives, if the goal is the same they support the person. And a good  
037 example is Lucky Malaza which they helped (.) and other people and we view that same view.  
038 We hol we believe that we should support someone that is anti-communist.

039 *Leslie.* Oh is that the only reason that you would (.) all of a sudden (.) he is not your  
040 member is he?

041 *Vermeulen.* No he is not a mem member.

042 *Leslie.* Are you a South African?

043 *Vermeulen.* Yes, I'm a South African.

044 *Leslie.* Is he a South African?

045 *Vermeulen.* I'm not su:re.

046 *Leslie.* But you just like him?

047 *Vermeulen.* No, it its not a matter of liking. You know we also supported Barend Strydom,  
048 but I were the only person on the right wing (.) side of the political spectrum that criticized  
049 him because he shot at Blacks randomly. We're not for that kind of attitude, but we (.) felt  
050 that we had to support him as well and I had quite a hand in assisting him to get indemnity.

051 *Leslie.* Ok .um you are trying to arrange indemnity for (.) Janus Waluz are you not?

052 *Vermeulen.* Well first of all we have to go (.....) court case and then er if he gets  
053 sentenced, then we'll start to look at the er indemnity case.

054 *Leslie.* Ok, you said Hani asked for it.

055 *Vermeulen.* Right, um Hani is a person that was known for double talking. You know that  
056 if you look at the history of the ANC while Hani was commander of Umkontho we Sizwe,

057 there were (.) innocent children and elderly people (.) murdered (.) from the beginning of the  
058 ANC up to today (.) and in doing double talking like er in saying that the: its wrong to kill  
059 children, he first had to distance himself from other people being killed.

060 *Leslie*. Ok, (which is exactly the point) the Hani of the past three or four weeks was the one  
061 talking peace preaching peace all the time. Did you like what he was saying then?

062 *Vermeulen*. I did like but I were cautious because as all trained public relations people in the  
063 communist field do (.) is they double talk them out.

064 *Leslie*. Ok, did you hate Hani's political views, that of perhaps espousing communism. Is that  
065 the reason why you would support somebody who you would say is anti-communist?

066 *Vermeulen*. Yes. Communists have murdered 200 people 200 000 er 200 000 000 people in  
067 Europe. More than 200 000 000 people has also been tortured. Anyone that support an  
068 ideology like that, I got a big question mark on.

069 *Leslie*. Um, would you regard Mr Hani as having been your compatriot, somebody who was  
070 born and bred in South Africa like you you would argue you are. Um would you:: have  
071 wanted to see him killed?

072 *Vermeulen*. I do not agree with the deed, I do not agree with the deed, but it is necessary  
073 like in the case of the ANC also (.) .to when you got common goal, like in this case of Mr.  
074 Waluz that he opposes communism. I need to support him.

075 *Leslie*. Irrespective of how other people feel?

076 *Vermeulen*. Well, in a political field, there's a lot of emotion at the moment going within the  
077 White people of the murdering of White people and elderly people. So its not actually a matter  
078 of the case of Hani. er both sides of the spectrum there is emotion building up, and we should  
079 handle this case with caution.

080 *Leslie*. Ok, if you were to be seen as supporting Waluz, and that's entirely your right, do you  
081 think it contributes in any way towards solving the problem of South Africa? Do you think  
082 it goes anywhere towards creating a peaceful atmosphere between yourselves as South African  
083 and the other South Africans who might hold a different view?

084 *Vermeulen*. Well, Marxism is unacceptable for this part of the country. Marxism failed after  
085 seventy of experimentation in the USSR and after 70 years it costed hundreds of millions of  
086 lives plus torture and I cannot, no sane person can permit that to happen here. Mr Hani never  
087 tried in any way to alter the constitution of the SACP. He never er distanced himself from  
088 things that Mr Slovo said. He never said he's sorry about all the killings in the past. So that  
089 what he said in the past 3 weeks might have been innocent, but at this stage, and unfortunately  
090 he ca won't be there to prove anything in the future, but at this stage we looked at it as double  
091 talking.

092 *Leslie*. Um, but does does that then qualify him to be assassinated in your view?

093 **Vermeulen.** .I'm not for any person to be assassinated. I think with talking (.) we can do a  
094 lot, but then on the other hand we must keep in mind that the ANC want to talk and they want  
095 to er war, and there is no way for both of of it. There's no room for both of it.

096 **Leslie.** But then the person you're supporting killed, assassinated people, or assassinated Mr  
097 Hani. Um and that that is not talking.

098 **Vermeulen.** Right, the fact is that one should look at a motive, at a background of a person.  
099 .The person that killed Mr Hani was someone that fled communist tyranny. He was a victim  
100 for the best part of his life of communist tyranny and its logical that in a time of despair  
101 anyone of those people feel more threatened than any anyone else and he would go for the  
102 chief of the Communist Party.

103 **Leslie.** So you give a blessing to the deed.

104 **Vermeulen.** I don't give a blessing, but what I do is I say that I can understand (.) why he  
105 did it.

106 **Leslie.** Um, looking at your movement, you seem to come in only when right wingers are  
107 involved in killing Black people. You you referred to Barend Strydom, you now (helping)  
108 Janus Waluz. Are you a racist?

109 **Vermeulen.** I'm prepared to help and assist anyone that asks me disregarding of his race,  
110 that's why we're also on a brink to open up the Preservatist Movement for all races.

111 **Leslie.** Are you a racist?

112 **Vermeulen.** I'm proud that I'm White, and I expect anyone to be proud to be an Indian,  
113 Black, or whatever he is. Er so I won't say I'm a racist because of my I've got very good  
114 friends over the racial background.

115 **Leslie.** Um, Mr Vermeulen, are you a Christian?

116 **Vermeulen.** That's correct.

117 **Leslie.** Does your Christian beliefs (.) allow you to identify with killers?

118 **Vermeulen.** First of all Hani is not a Christian. He's an atheist. That we all know. So I don't  
119 think we should get Christianity involved.

120 **Leslie.** No I'm talking about you. You alone, not Hani.

121 **Vermeulen.** All right. In my case.

122 **Leslie.** Are you a Christian.

123 **Vermeulen.** I am a Christian, but I'm we're also involved in a struggle and I won't permit  
124 that anyone that is against communism, whether I agree with he's deed or not. In Mr. Waluz'  
125 case. as I already explained, he came from a communist country and his feelings his emotions  
126 especially in this time of the political development .is:: something that we has to take (.) and  
127 look at.

128 **Leslie.** Are you anti-communist?

129 *Vermeulen.* I'm an anti-communist?

130 *Leslie.* Would you have done the same thing given the chance?

131 *Vermeulen.* No. I I wouldn't have done it now, but if its becoming a fact that communism  
132 will take over, yes then I would have done it.

133 *Leslie.* (And) you still call yourself a Christian?

134 *Vermeulen.* Christianity got nothing to do with war. When the Israelites entered Israel (.)  
135 they went and have had wars. Christianity had nothing to do with wars. But communism  
136 represent anti-christ, they represent atheists, and that is why I got a duty as a Christian to  
137 combat communism.

138 *Leslie.* As a Christian one might have imagined that you would even go a step further and  
139 try and win over and not kill, but win over atheists into the Christian faith or at least convert  
140 them as a Christian. Would you have considered doing that in Hani's case?

141 *Vermeulen.* Give him a chance, yes. But I never knew Hani (.) personally, er first of all.  
142 And secondly, they are talking war. They're prepared to invade my country. Hani is not a  
143 South African, he's a Xhosa. And

144 [ and I judge.

145 *Leslie.* [ from where? A Xhosa from where?

146 *Vermeulen.* A Xhosa, well I can't remember but he has [inaudible]

147 *Leslie.* From Transkei in South Africa.

148 *Vermeulen.* From Transkei

149 *Leslie.* But in South Africa.

150 *Vermeulen.* Transkei is a (novel) another traditional land that belonged to the Xhosa people.

151 *Leslie.* In South Africa.

152 *Vermeulen.* Well, in South Africa, but its not part of South Africa.

153 *Leslie.* Um, let us just rap this whole discussion up Mr. Vermeulen. What do you think your  
154 movement's contribution should be:: in bringing about this desired South Africa where all the  
155 people are equal. Christians and atheists are the children of God and they need to live together  
156 and share everything and anything.

157 *Vermeulen.* That is one of my main desires and we've been working and discussing politics  
158 also down in from from Eastern bloc countries and so on and we learned a lot from Eastern  
159 bloc countries. We discovered that ideologies create friction and war and hatred. I realize that.  
160 My first option is to take a peace option. Really, deep in my heart I take the peace option  
161 before war. And (.) that's why we gonna change our name to the Preservatist Movement,  
162 because we strongly believe that every group must have a say on his own future.

163 *Leslie.* Ok, thank you for talking to us, but one last word, are you sorry that Hani has died  
164 (.) as a Christian.

- 165 **Vermeulen.** (Yes that) its not the way I would have preferred it. I would have like to give  
166 him a chance. If I could have prevented this I would have done this but I also got a duty, as  
167 the ANC has a duty to assist their people.
- 168 **Leslie.** On that note Mr. Vermeulen, thanks for speaking to us, and thanks for your time.
- 169 **Vermeulen.** Thanks a stack.
- 170 **Leslie.** You're welcome.
- 171 **Vermeulen.** Goodbye.